



SEQUENCE LISTING

<110> Mayo Foundation for Medical Education and Research
Bayer Healthcare LLC
Burgess, Christopher
Myerow, Susan
Thiagalingam, Arunthathi
Maimonis, Peter
Molino, Gary
Burgart, Lawrence
Boardman, Lisa A.
Thibodeau, Steven
Lewis, Marcia

<120> Use of Differentially Expressed Nucleic Acid Sequences as
Biomarkers for Cancer

<130> 1657/2022

<140> US 10/700,439

<141> 2003-11-04

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<213> Homo sapiens

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<213> Homo sapiens

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<211> 5784

<212> DNA

<213> Homo sapiens

<400> 17

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<213> Homo sapiens

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<211> 555

<212> DNA

<213> Homo sapiens

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<211> 2334

<212> DNA

<213> Homo sapiens

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<211> 921

<212> DNA

<213> Homo sapiens

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<210> 22
<211> 345
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<210> 24
<211> 946
<212> DNA
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<211> 11185

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<211> 2133

<212> DNA

<213> Homo sapiens

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<211> 1128

<212> DNA

<213> Homo sapiens

<400> 48

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<212> DNA

<213> Homo sapiens

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<211> 3494

<212> DNA

<213> Homo sapiens

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<211> 1309

<212> DNA

<213> Homo sapiens

<400> 51

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<211> 596

<212> DNA

<213> Homo sapiens

<400> 52

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<211> 3218

<212> DNA

<213> Homo sapiens

<400> 53

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<211> 1630

<212> DNA

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 1306

<212> DNA

<213> Homo sapiens

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<211> 2090

<212> DNA

<213> Homo sapiens

<400> 57

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<211> 2292

<212> DNA

<213> Homo sapiens

<400> 58

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<210> 59

<211> 1994

<212> DNA

<213> Homo sapiens

<400> 59

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<211> 2518

<212> DNA

<213> Homo sapiens

<400> 60

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<210> 61

<211> 1510

<212> DNA

<213> Homo sapiens

<400> 61

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<210> 62

<211> 1104

<212> DNA

<213> Homo sapiens

<400> 62

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<210> 63

<211> 1484

<212> DNA

<213> Homo sapiens

<400> 63

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<210> 64

<211> 1704

<212> DNA

<213> Homo sapiens

<400> 64

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<210> 65

<211> 1182
 <212> DNA
 <213> Homo sapiens

<400> 65

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<210> 66
 <211> 2786
 <212> DNA
 <213> Homo sapiens

<400> 66

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

<400> 71

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<211> 2107

<212> DNA

<213> Homo sapiens

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<400> 73

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 <211> 2396
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 <213> Homo sapiens

<400> 74

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<211> 2863

<212> DNA

<213> Homo sapiens

<400> 75

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<212> DNA

<213> Homo sapiens

<400> 76

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<212> DNA

<213> Homo sapiens

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<211> 2175

<212> DNA

<213> Homo sapiens

<400> 78

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<211> 386

<212> DNA

<213> Homo sapiens

<400> 79

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<213> Homo sapiens

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<211> 2058

<212> DNA

<213> Homo sapiens

<400> 86

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<211> 3311

<212> DNA

<213> Homo sapiens

<400> 87

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 <213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> PRT
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225					230					235					240
Leu	Glu	Asp	Met	Arg	Gln	Glu	Tyr	Glu	Leu	Ile	Ile	Lys	Lys	Lys	His
				245					250					255	
Arg	Asp	Leu	Asp	Thr	Trp	Tyr	Lys	Glu	Gln	Ser	Ala	Ala	Met	Ser	Gln
			260					265					270		
Glu	Ala	Ala	Ser	Pro	Ala	Thr	Val	Gln	Ser	Arg	Gln	Gly	Asp	Ile	His
		275					280					285			
Glu	Leu	Lys	Arg	Thr	Phe	Gln	Ala	Leu	Glu	Ile	Asp	Leu	Gln	Thr	Gln
		290					295				300				
Tyr	Ser	Thr	Lys	Ser	Ala	Leu	Glu	Asn	Met	Leu	Ser	Glu	Thr	Gln	Ser
305					310					315					320
Arg	Tyr	Ser	Cys	Lys	Leu	Gln	Asp	Met	Gln	Glu	Ile	Ile	Ser	His	Tyr
				325					330					335	
Glu	Glu	Glu	Leu	Thr	Gln	Leu	Arg	His	Glu	Leu	Glu	Arg	Gln	Asn	Asn
			340					345					350		
Glu	Tyr	Gln	Val	Leu	Leu	Gly	Ile	Lys	Thr	His	Leu	Glu	Lys	Glu	Ile
		355					360					365			
Thr	Thr	Tyr	Arg	Arg	Leu	Leu	Glu	Gly	Glu	Ser	Glu	Gly	Thr	Arg	Glu
		370					375					380			
Glu	Ser	Lys	Ser	Ser	Met	Lys	Val	Ser	Ala	Thr	Pro	Lys	Ile	Lys	Ala
385					390					395					400
Ile	Thr	Gln	Glu	Thr	Ile	Asn	Gly	Arg	Leu	Val	Leu	Cys	Gln	Val	Asn
				405					410					415	
Glu	Ile	Gln	Lys	His	Ala										
			420												

<210> 95

<211> 166

<212> PRT

<213> Homo sapiens

<400> 95

Met	Ala	Gln	Thr	Ser	Ser	Tyr	Phe	Met	Leu	Ile	Ser	Cys	Leu	Met	Phe
1				5					10					15	
Leu	Ser	Gln	Ser	Gln	Gly	Gln	Glu	Ala	Gln	Thr	Glu	Leu	Pro	Gln	Ala
			20					25					30		
Arg	Ile	Ser	Cys	Pro	Glu	Gly	Thr	Asn	Ala	Tyr	Arg	Ser	Tyr	Cys	Tyr
		35					40					45			
Tyr	Phe	Asn	Glu	Asp	Arg	Glu	Thr	Trp	Val	Asp	Ala	Asp	Leu	Tyr	Cys
	50					55				60					
Gln	Asn	Met	Asn	Ser	Gly	Asn	Leu	Val	Ser	Val	Leu	Thr	Gln	Ala	Glu
65					70				75						80
Gly	Ala	Phe	Val	Ala	Ser	Leu	Ile	Lys	Glu	Ser	Gly	Thr	Asp	Asp	Phe
				85				90						95	
Asn	Val	Trp	Ile	Gly	Leu	His	Asp	Pro	Lys	Lys	Asn	Arg	Arg	Trp	His
			100					105					110		
Trp	Ser	Ser	Gly	Ser	Leu	Val	Ser	Tyr	Lys	Ser	Trp	Gly	Ile	Gly	Ala
		115					120					125			
Pro	Ser	Ser	Val	Asn	Pro	Gly	Tyr	Cys	Val	Ser	Leu	Thr	Ser	Ser	Thr
	130					135					140				
Gly	Phe	Gln	Lys	Trp	Lys	Asp	Val	Pro	Cys	Glu	Asp	Lys	Phe	Ser	Phe
145					150					155					160
Val	Cys	Lys	Phe	Lys	Asn										
				165											

<210> 96

<211> 166

<212> PRT

<213> Homo sapiens

<400> 96

Met	Ala	Gln	Thr	Asn	Ser	Phe	Phe	Met	Leu	Ile	Ser	Ser	Leu	Met	Phe
1				5					10					15	
Leu	Ser	Leu	Ser	Gln	Gly	Gln	Glu	Ser	Gln	Thr	Glu	Leu	Pro	Asn	Pro
			20					25					30		
Arg	Ile	Ser	Cys	Pro	Glu	Gly	Thr	Asn	Ala	Tyr	Arg	Ser	Tyr	Cys	Tyr
		35					40					45			
Tyr	Phe	Asn	Glu	Asp	Pro	Glu	Thr	Trp	Val	Asp	Ala	Asp	Leu	Tyr	Cys
	50					55				60					
Gln	Asn	Met	Asn	Ser	Gly	Asn	Leu	Val	Ser	Val	Leu	Thr	Gln	Ala	Glu
65					70				75						80
Gly	Ala	Phe	Val	Ala	Ser	Leu	Ile	Lys	Glu	Ser	Ser	Thr	Asp	Asp	Ser
				85				90						95	
Asn	Val	Trp	Ile	Gly	Leu	His	Asp	Pro	Lys	Lys	Asn	Arg	Arg	Trp	His
			100					105					110		
Trp	Ser	Ser	Gly	Ser	Leu	Val	Ser	Tyr	Lys	Ser	Trp	Asp	Thr	Gly	Ser
		115					120					125			
Pro	Ser	Ser	Ala	Asn	Ala	Gly	Tyr	Cys	Ala	Ser	Leu	Thr	Ser	Cys	Ser
	130					135					140				
Gly	Phe	Lys	Lys	Trp	Lys	Asp	Glu	Ser	Cys	Glu	Lys	Lys	Phe	Ser	Phe
145					150					155					160
Val	Cys	Lys	Phe	Lys	Asn										
				165											

<210> 97
 <211> 411
 <212> PRT
 <213> Homo sapiens

<400> 97

Met	Trp	Ser	Gly	Trp	Trp	Leu	Trp	Pro	Leu	Val	Ala	Val	Cys	Thr	Ala
1				5					10					15	
Asp	Phe	Phe	Arg	Asp	Glu	Ala	Glu	Arg	Ile	Met	Arg	Asp	Ser	Pro	Val
			20					25					30		
Ile	Asp	Gly	His	Asn	Asp	Leu	Pro	Trp	Gln	Leu	Leu	Asp	Met	Phe	Asn
		35					40					45			
Asn	Arg	Leu	Gln	Asp	Glu	Arg	Ala	Asn	Leu	Thr	Thr	Leu	Ala	Gly	Thr
		50				55					60				
His	Thr	Asn	Ile	Pro	Lys	Leu	Arg	Ala	Gly	Phe	Val	Gly	Gly	Gln	Phe
65					70					75					80
Trp	Ser	Val	Tyr	Thr	Pro	Cys	Asp	Thr	Gln	Asn	Lys	Asp	Ala	Val	Arg
				85					90					95	
Arg	Thr	Leu	Glu	Gln	Met	Asp	Val	Val	His	Arg	Met	Cys	Arg	Met	Tyr
			100					105				110			
Pro	Glu	Thr	Phe	Leu	Tyr	Val	Thr	Ser	Ser	Ala	Gly	Ile	Arg	Gln	Ala
		115					120					125			
Phe	Arg	Glu	Gly	Lys	Val	Ala	Ser	Leu	Ile	Gly	Val	Glu	Gly	Gly	His
	130					135					140				
Ser	Ile	Asp	Ser	Ser	Leu	Gly	Val	Leu	Arg	Ala	Leu	Tyr	Gln	Leu	Gly
145					150					155					160
Met	Arg	Tyr	Leu	Thr	Leu	Thr	His	Ser	Cys	Asn	Thr	Pro	Trp	Ala	Asp
				165					170					175	
Asn	Trp	Leu	Val	Asp	Thr	Gly	Asp	Ser	Glu	Pro	Gln	Ser	Gln	Gly	Leu
			180					185					190		
Ser	Pro	Phe	Gly	Gln	Arg	Val	Val	Lys	Glu	Leu	Asn	Arg	Leu	Gly	Val
		195					200					205			
Leu	Ile	Asp	Leu	Ala	His	Val	Ser	Val	Ala	Thr	Met	Lys	Ala	Thr	Leu
	210					215					220				
Gln	Leu	Ser	Arg	Ala	Pro	Val	Ile	Phe	Ser	His	Ser	Ser	Ala	Tyr	Ser
225					230					235					240
Val	Cys	Ala	Ser	Arg	Arg	Asn	Val	Pro	Asp	Asp	Val	Leu	Arg	Leu	Val
				245					250					255	
Lys	Gln	Thr	Asp	Ser	Leu	Val	Met	Val	Asn	Phe	Tyr	Asn	Asn	Tyr	Ile
			260					265					270		
Ser	Cys	Thr	Asn	Lys	Ala	Asn	Leu	Ser	Gln	Val	Ala	Asp	His	Leu	Asp
		275				280						285			
His	Ile	Lys	Glu	Val	Ala	Gly	Ala	Arg	Ala	Val	Gly	Phe	Gly	Gly	Asp
	290					295					300				
Phe	Asp	Gly	Val	Pro	Arg	Val	Pro	Glu	Gly	Leu	Glu	Asp	Val	Ser	Lys
305					310					315					320
Tyr	Pro	Asp	Leu	Ile	Ala	Glu	Leu	Leu	Arg	Arg	Asn	Trp	Thr	Glu	Ala
				325					330					335	
Glu	Val	Lys	Gly	Ala	Leu	Ala	Asp	Asn	Leu	Leu	Arg	Val	Phe	Glu	Ala
			340					345					350		
Val	Glu	Gln	Ala	Ser	Asn	Leu	Thr	Gln	Ala	Pro	Glu	Glu	Glu	Pro	Ile
			355					360					365		
Pro	Leu	Asp	Gln	Leu	Gly	Gly	Ser	Cys	Arg	Thr	His	Tyr	Gly	Tyr	Ser
	370					375					380				
Ser	Gly	Ala	Ser	Ser	Leu	His	Arg	His	Trp	Gly	Leu	Leu	Leu	Ala	Ser
385					390					395					400
Leu	Ala	Pro	Leu	Val	Leu	Cys	Leu	Ser	Leu	Leu					

405

410

<210> 98

<211> 99

<212> PRT

<213> Homo sapiens

<400> 98

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Met Thr Ser Lys Leu Ala Val Ala Leu Leu Ala Ala Phe Leu Ile Ser
 1          5          10          15
Ala Ala Leu Cys Glu Gly Ala Val Leu Pro Arg Ser Ala Lys Glu Leu
          20          25          30
Arg Cys Gln Cys Ile Lys Thr Tyr Ser Lys Pro Phe His Pro Lys Phe
          35          40          45
Ile Lys Glu Leu Arg Val Ile Glu Ser Gly Pro His Cys Ala Asn Thr
          50          55          60
Glu Ile Ile Val Lys Leu Ser Asp Gly Arg Glu Leu Cys Leu Asp Pro
65          70          75          80
Lys Glu Asn Trp Val Gln Arg Val Val Glu Lys Phe Leu Lys Arg Ala
          85          90          95
Glu Asn Ser

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<210> 99

<211> 469

<212> PRT

<213> Homo sapiens

<400> 99

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Met His Ser Phe Pro Pro Leu Leu Leu Leu Leu Phe Trp Gly Val Val
 1          5          10          15
Ser His Ser Phe Pro Ala Thr Leu Glu Thr Gln Glu Gln Asp Val Asp
          20          25          30
Leu Val Gln Lys Tyr Leu Glu Lys Tyr Tyr Asn Leu Lys Asn Asp Gly
          35          40          45
Arg Gln Val Glu Lys Arg Arg Asn Ser Gly Pro Val Val Glu Lys Leu
50          55          60
Lys Gln Met Gln Glu Phe Phe Gly Leu Lys Val Thr Gly Lys Pro Asp
65          70          75          80
Ala Glu Thr Leu Lys Val Met Lys Gln Pro Arg Cys Gly Val Pro Asp
          85          90          95
Val Ala Gln Phe Val Leu Thr Glu Gly Asn Pro Arg Trp Glu Gln Thr
          100          105          110
His Leu Thr Tyr Arg Ile Glu Asn Tyr Thr Pro Asp Leu Pro Arg Ala
          115          120          125
Asp Val Asp His Ala Ile Glu Lys Ala Phe Gln Leu Trp Ser Asn Val
130          135          140
Thr Pro Leu Thr Phe Thr Lys Val Ser Glu Gly Gln Ala Asp Ile Met
145          150          155          160
Ile Ser Phe Val Arg Gly Asp His Arg Asp Asn Ser Pro Phe Asp Gly
          165          170          175
Pro Gly Gly Asn Leu Ala His Ala Phe Gln Pro Gly Pro Gly Ile Gly
          180          185          190
Gly Asp Ala His Phe Asp Glu Asp Glu Arg Trp Thr Asn Asn Phe Arg
          195          200          205

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Glu Tyr Asn Leu His Arg Val Ala Ala His Glu Leu Gly His Ser Leu
 210 215 220
 Gly Leu Ser His Ser Thr Asp Ile Gly Ala Leu Met Tyr Pro Ser Tyr
 225 230 235 240
 Thr Phe Ser Gly Asp Val Gln Leu Ala Gln Asp Asp Ile Asp Gly Ile
 245 250 255
 Gln Ala Ile Tyr Gly Arg Ser Gln Asn Pro Val Gln Pro Ile Gly Pro
 260 265 270
 Gln Thr Pro Lys Ala Cys Asp Ser Lys Leu Thr Phe Asp Ala Ile Thr
 275 280 285
 Thr Ile Arg Gly Glu Val Met Phe Phe Lys Asp Arg Phe Tyr Met Arg
 290 295 300
 Thr Asn Pro Phe Tyr Pro Glu Val Glu Leu Asn Phe Ile Ser Val Phe
 305 310 315 320
 Trp Pro Gln Leu Pro Asn Gly Leu Glu Ala Ala Tyr Glu Phe Ala Asp
 325 330 335
 Arg Asp Glu Val Arg Phe Phe Lys Gly Asn Lys Tyr Trp Ala Val Gln
 340 345 350
 Gly Gln Asn Val Leu His Gly Tyr Pro Lys Asp Ile Tyr Ser Ser Phe
 355 360 365
 Gly Phe Pro Arg Thr Val Lys His Ile Asp Ala Ala Leu Ser Glu Glu
 370 375 380
 Asn Thr Gly Lys Thr Tyr Phe Phe Val Ala Asn Lys Tyr Trp Arg Tyr
 385 390 395 400
 Asp Glu Tyr Lys Arg Ser Met Asp Pro Gly Tyr Pro Lys Met Ile Ala
 405 410 415
 His Asp Phe Pro Gly Ile Gly His Lys Val Asp Ala Val Phe Met Lys
 420 425 430
 Asp Gly Phe Phe Tyr Phe Phe His Gly Thr Arg Gln Tyr Lys Phe Asp
 435 440 445
 Pro Lys Thr Lys Arg Ile Leu Thr Leu Gln Lys Ala Asn Ser Trp Phe
 450 455 460
 Asn Cys Arg Lys Asn
 465

<210> 100
 <211> 267
 <212> PRT
 <213> Homo sapiens

<400> 100
 Met Arg Leu Thr Val Leu Cys Ala Val Cys Leu Leu Pro Gly Ser Leu
 1 5 10 15
 Ala Leu Pro Leu Pro Gln Glu Ala Gly Gly Met Ser Glu Leu Gln Trp
 20 25 30
 Glu Gln Ala Gln Asp Tyr Leu Lys Arg Phe Tyr Leu Tyr Asp Ser Glu
 35 40 45
 Thr Lys Asn Ala Asn Ser Leu Glu Ala Lys Leu Lys Glu Met Gln Lys
 50 55 60
 Phe Phe Gly Leu Pro Ile Thr Gly Met Leu Asn Ser Arg Val Ile Glu
 65 70 75 80
 Ile Met Gln Lys Pro Arg Cys Gly Val Pro Asp Val Ala Glu Tyr Ser
 85 90 95
 Leu Phe Pro Asn Ser Pro Lys Trp Thr Ser Lys Val Val Thr Tyr Arg
 100 105 110
 Ile Val Ser Tyr Thr Arg Asp Leu Pro His Ile Thr Val Asp Arg Leu

Asn	Glu	His	Ser	Asp	Val	Ile	Asp	Ser	Gln	Glu	Leu	Ser	Lys	Val	Ser
				245					250					255	
Arg	Glu	Phe	His	Ser	His	Glu	Phe	His	Ser	His	Glu	Asp	Met	Leu	Val
			260					265					270		
Val	Asp	Pro	Lys	Ser	Lys	Glu	Glu	Asp	Lys	His	Leu	Lys	Phe	Arg	Ile
		275					280					285			
Ser	His	Glu	Leu	Asp	Ser	Ala	Ser	Ser	Glu	Val	Asn				
	290					295					300				

<210> 102
 <211> 98
 <212> PRT
 <213> Homo sapiens

<400> 102

Met	Asn	Gln	Thr	Ala	Ile	Leu	Ile	Cys	Cys	Leu	Ile	Phe	Leu	Thr	Leu
1				5					10					15	
Ser	Gly	Ile	Gln	Gly	Val	Pro	Leu	Ser	Arg	Thr	Val	Arg	Cys	Thr	Cys
			20					25					30		
Ile	Ser	Ile	Ser	Asn	Gln	Pro	Val	Asn	Pro	Arg	Ser	Leu	Glu	Lys	Leu
		35					40					45			
Glu	Ile	Ile	Pro	Ala	Ser	Gln	Phe	Cys	Pro	Arg	Val	Glu	Ile	Ile	Ala
	50					55					60				
Thr	Met	Lys	Lys	Lys	Gly	Glu	Lys	Arg	Cys	Leu	Asn	Pro	Glu	Ser	Lys
65					70					75					80
Ala	Ile	Lys	Asn	Leu	Leu	Lys	Ala	Val	Ser	Lys	Glu	Met	Ser	Lys	Arg
				85					90					95	

Ser Pro

<210> 103
 <211> 871
 <212> PRT
 <213> Homo sapiens

<400> 103

Met	Lys	Tyr	Ser	Cys	Cys	Ala	Leu	Val	Leu	Ala	Val	Leu	Gly	Thr	Glu
1				5					10					15	
Leu	Leu	Gly	Ser	Leu	Cys	Ser	Thr	Val	Arg	Ser	Pro	Arg	Phe	Arg	Gly
			20					25					30		
Arg	Ile	Gln	Gln	Glu	Arg	Lys	Asn	Ile	Arg	Pro	Asn	Ile	Ile	Leu	Val
		35					40					45			
Pro	Thr	Asp	Asp	Gln	Asp	Val	Glu	Leu	Gly	Ser	Leu	Gln	Val	Met	Asn
	50					55					60				
Lys	Thr	Arg	Lys	Ile	Met	Glu	His	Gly	Gly	Ala	Thr	Phe	Ile	Asn	Ala
65					70					75					80
Phe	Val	Thr	Thr	Pro	Met	Cys	Cys	Pro	Ser	Arg	Ser	Ser	Met	Leu	Thr
				85					90					95	
Gly	Lys	Tyr	Val	His	Asn	His	Asn	Val	Tyr	Thr	Asn	Asn	Glu	Asn	Cys
			100					105					110		
Ser	Ser	Pro	Ser	Trp	Gln	Ala	Met	His	Glu	Pro	Arg	Thr	Phe	Ala	Val
		115					120					125			
Tyr	Leu	Asn	Asn	Thr	Gly	Tyr	Arg	Thr	Ala	Phe	Phe	Gly	Lys	Tyr	Leu
	130					135					140				
Asn	Glu	Tyr	Asn	Gly	Ser	Tyr	Ile	Pro	Pro	Gly	Trp	Arg	Glu	Trp	Leu

145					150					155				160
Gly	Leu	Ile	Lys	Asn	Ser	Arg	Phe	Tyr	Asn	Tyr	Thr	Val	Cys	Arg
				165					170					175
Gly	Ile	Lys	Glu	Lys	His	Gly	Phe	Asp	Tyr	Ala	Lys	Asp	Tyr	Phe
			180					185					190	Thr
Asp	Leu	Ile	Thr	Asn	Glu	Ser	Ile	Asn	Tyr	Phe	Lys	Met	Ser	Lys
			195				200					205		Arg
Met	Tyr	Pro	His	Arg	Pro	Val	Met	Met	Val	Ile	Ser	His	Ala	Ala
			210			215					220			Pro
His	Gly	Pro	Glu	Asp	Ser	Ala	Pro	Gln	Phe	Ser	Lys	Leu	Tyr	Pro
225					230					235				240
Ala	Ser	Gln	His	Ile	Thr	Pro	Ser	Tyr	Asn	Tyr	Ala	Pro	Asn	Met
			245					250					255	Asp
Lys	His	Trp	Ile	Met	Gln	Tyr	Thr	Gly	Pro	Met	Leu	Pro	Ile	His
			260					265					270	Met
Glu	Phe	Thr	Asn	Ile	Leu	Gln	Arg	Lys	Arg	Leu	Gln	Thr	Leu	Met
			275				280					285		Ser
Val	Asp	Asp	Ser	Val	Glu	Arg	Leu	Tyr	Asn	Met	Leu	Val	Glu	Thr
			290			295					300			Gly
Glu	Leu	Glu	Asn	Thr	Tyr	Ile	Ile	Tyr	Thr	Ala	Asp	His	Gly	Tyr
305					310					315				His
Ile	Gly	Gln	Phe	Gly	Leu	Val	Lys	Gly	Lys	Ser	Met	Pro	Tyr	Asp
			325					330					335	Phe
Asp	Ile	Arg	Val	Pro	Phe	Phe	Ile	Arg	Gly	Pro	Ser	Val	Glu	Pro
			340					345					350	Gly
Ser	Ile	Val	Pro	Gln	Ile	Val	Leu	Asn	Ile	Asp	Leu	Ala	Pro	Thr
			355				360					365		Ile
Leu	Asp	Ile	Ala	Gly	Leu	Asp	Thr	Pro	Pro	Asp	Val	Asp	Gly	Lys
			370			375					380			Ser
Val	Leu	Lys	Leu	Leu	Asp	Pro	Glu	Lys	Pro	Gly	Asn	Arg	Phe	Arg
385					390					395				Thr
Asn	Lys	Lys	Ala	Lys	Ile	Trp	Arg	Asp	Thr	Phe	Leu	Val	Glu	Arg
			405					410					415	Gly
Lys	Phe	Leu	Arg	Lys	Lys	Glu	Glu	Ser	Ser	Lys	Asn	Ile	Gln	Gln
			420					425					430	Ser
Asn	His	Leu	Pro	Lys	Tyr	Glu	Arg	Val	Lys	Glu	Leu	Cys	Gln	Gln
			435				440					445		Ala
Arg	Tyr	Gln	Thr	Ala	Cys	Glu	Gln	Pro	Gly	Gln	Lys	Trp	Gln	Cys
			450			455				460				Ile
Glu	Asp	Thr	Ser	Gly	Lys	Leu	Arg	Ile	His	Lys	Cys	Lys	Gly	Pro
465					470					475				480
Asp	Leu	Leu	Thr	Val	Arg	Gln	Ser	Thr	Arg	Asn	Leu	Tyr	Ala	Arg
			485					490					495	Gly
Phe	His	Asp	Lys	Asp	Lys	Glu	Cys	Ser	Cys	Arg	Glu	Ser	Gly	Tyr
			500					505					510	Arg
Ala	Ser	Arg	Ser	Gln	Arg	Lys	Ser	Gln	Arg	Gln	Phe	Leu	Arg	Asn
			515				520					525		Gln
Gly	Thr	Pro	Lys	Tyr	Lys	Pro	Arg	Phe	Val	His	Thr	Arg	Gln	Thr
			530			535					540			Arg
Ser	Leu	Ser	Val	Glu	Phe	Glu	Gly	Glu	Ile	Tyr	Asp	Ile	Asn	Leu
545					550					555				Glu
Glu	Glu	Glu	Glu	Leu	Gln	Val	Leu	Gln	Pro	Arg	Asn	Ile	Ala	Lys
			565					570					575	Arg
His	Asp	Glu	Gly	His	Lys	Gly	Pro	Arg	Asp	Leu	Gln	Ala	Ser	Ser
			580					585				590		Gly
Gly	Asn	Arg	Gly	Arg	Met	Leu	Ala	Asp	Ser	Ser	Asn	Ala	Val	Gly
			595			600						605		Pro

Pro Thr Thr Val Arg Val Thr His Lys Cys Phe Ile Leu Pro Asn Asp
 610 615 620
 Ser Ile His Cys Glu Arg Glu Leu Tyr Gln Ser Ala Arg Ala Trp Lys
 625 630 635 640
 Asp His Lys Ala Tyr Ile Asp Lys Glu Ile Glu Ala Leu Gln Asp Lys
 645 650 655
 Ile Lys Asn Leu Arg Glu Val Arg Gly His Leu Lys Arg Arg Lys Pro
 660 665 670
 Glu Glu Cys Ser Cys Ser Lys Gln Ser Tyr Tyr Asn Lys Glu Lys Gly
 675 680 685
 Val Lys Lys Gln Glu Lys Leu Lys Ser His Leu His Pro Phe Lys Glu
 690 695 700
 Ala Ala Gln Glu Val Asp Ser Lys Leu Gln Leu Phe Lys Glu Asn Asn
 705 710 715 720
 Arg Arg Arg Lys Lys Glu Arg Lys Glu Lys Arg Arg Gln Arg Lys Gly
 725 730 735
 Glu Glu Cys Ser Leu Pro Gly Leu Thr Cys Phe Thr His Asp Asn Asn
 740 745 750
 His Trp Gln Thr Ala Pro Phe Trp Asn Leu Gly Ser Phe Cys Ala Cys
 755 760 765
 Thr Ser Ser Asn Asn Asn Thr Tyr Trp Cys Leu Arg Thr Val Asn Glu
 770 775 780
 Thr His Asn Phe Leu Phe Cys Glu Phe Ala Thr Gly Phe Leu Glu Tyr
 785 790 795 800
 Phe Asp Met Asn Thr Asp Pro Tyr Gln Leu Thr Asn Thr Val His Thr
 805 810 815
 Val Glu Arg Gly Ile Leu Asn Gln Leu His Val Gln Leu Met Glu Leu
 820 825 830
 Arg Ser Cys Gln Gly Tyr Lys Gln Cys Asn Pro Arg Pro Lys Asn Leu
 835 840 845
 Asp Val Gly Asn Lys Asp Gly Gly Ser Tyr Asp Leu His Arg Gly Gln
 850 855 860
 Leu Trp Asp Gly Trp Glu Gly
 865 870

<210> 104
 <211> 1496
 <212> PRT
 <213> Homo sapiens

<400> 104
 Met Met Ala Asn Trp Ala Glu Ala Arg Pro Leu Leu Ile Leu Ile Val
 1 5 10 15
 Leu Leu Gly Gln Phe Val Ser Ile Lys Ala Gln Glu Glu Asp Glu Asp
 20 25 30
 Glu Gly Tyr Gly Glu Glu Ile Ala Cys Thr Gln Asn Gly Gln Met Tyr
 35 40 45
 Leu Asn Arg Asp Ile Trp Lys Pro Ala Pro Cys Gln Ile Cys Val Cys
 50 55 60
 Asp Asn Gly Ala Ile Leu Cys Asp Lys Ile Glu Cys Gln Asp Val Leu
 65 70 75 80
 Asp Cys Ala Asp Pro Val Thr Pro Pro Gly Glu Cys Cys Pro Val Cys
 85 90 95
 Ser Gln Thr Pro Gly Gly Gly Asn Thr Asn Phe Gly Arg Gly Arg Lys
 100 105 110
 Gly Gln Lys Gly Glu Pro Gly Leu Val Pro Val Val Thr Gly Ile Arg

Val	Gln	Gly	Pro	Glu	Gly	Lys	Leu	Gly	Pro	Leu	Gly	Ala	Pro	Gly	Glu	580	585	590
Asp	Gly	Arg	Pro	Gly	Pro	Pro	Gly	Ser	Ile	Gly	Ile	Lys	Gly	Gln	Pro	595	600	605
Gly	Thr	Met	Gly	Leu	Pro	Gly	Pro	Lys	Gly	Ser	Asn	Gly	Asp	Pro	Gly	610	615	620
Lys	Pro	Gly	Glu	Ala	Gly	Asn	Pro	Gly	Val	Pro	Gly	Gln	Arg	Gly	Ala	625	630	635
Pro	Gly	Lys	Asp	Gly	Lys	Val	Gly	Pro	Tyr	Gly	Pro	Pro	Gly	Pro	Pro	645	650	655
Gly	Leu	Arg	Gly	Glu	Arg	Gly	Glu	Gln	Gly	Pro	Pro	Gly	Pro	Thr	Gly	660	665	670
Phe	Gln	Gly	His	Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Glu	Gly	Gly	Lys	675	680	685
Pro	Gly	Asp	Gln	Gly	Val	Pro	Gly	Gly	Pro	Gly	Ala	Val	Gly	Pro	Leu	690	695	700
Gly	Pro	Arg	Gly	Glu	Arg	Gly	Asn	Pro	Gly	Glu	Arg	Gly	Glu	Pro	Gly	705	710	715
Ile	Thr	Gly	Leu	Pro	Gly	Glu	Lys	Gly	Met	Ala	Gly	Gly	His	Gly	Pro	725	730	735
Asp	Gly	Pro	Lys	Gly	Ser	Pro	Gly	Pro	Ser	Gly	Thr	Pro	Gly	Asp	Thr	740	745	750
Gly	Pro	Pro	Gly	Leu	Gln	Gly	Met	Pro	Gly	Glu	Arg	Gly	Ile	Ala	Gly	755	760	765
Thr	Pro	Gly	Pro	Lys	Gly	Asp	Arg	Gly	Gly	Ile	Gly	Glu	Lys	Gly	Ala	770	775	780
Glu	Gly	Thr	Ala	Gly	Asn	Asp	Gly	Ala	Gly	Gly	Leu	Pro	Gly	Pro	Leu	785	790	795
Gly	Pro	Pro	Gly	Pro	Ala	Gly	Leu	Leu	Gly	Glu	Lys	Gly	Glu	Pro	Gly	805	810	815
Pro	Arg	Gly	Leu	Val	Gly	Pro	Pro	Gly	Ser	Arg	Gly	Asn	Pro	Gly	Ser	820	825	830
Arg	Gly	Glu	Asn	Gly	Pro	Thr	Gly	Ala	Val	Gly	Phe	Ala	Gly	Pro	Gln	835	840	845
Gly	Ser	Asp	Gly	Gln	Pro	Gly	Val	Lys	Gly	Glu	Pro	Gly	Glu	Pro	Gly	850	855	860
Gln	Lys	Gly	Asp	Ala	Gly	Ser	Pro	Gly	Pro	Gln	Gly	Leu	Ala	Gly	Ser	865	870	875
Pro	Gly	Pro	His	Gly	Pro	Asn	Gly	Val	Pro	Gly	Leu	Lys	Gly	Gly	Arg	885	890	895
Gly	Thr	Gln	Gly	Pro	Pro	Gly	Ala	Thr	Gly	Phe	Pro	Gly	Ser	Ala	Gly	900	905	910
Arg	Val	Gly	Pro	Pro	Gly	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Ala	Gly	Pro	915	920	925
Leu	Gly	Glu	Pro	Gly	Lys	Glu	Gly	Pro	Pro	Gly	Pro	Arg	Gly	Asp	Pro	930	935	940
Gly	Ser	His	Gly	Arg	Val	Gly	Val	Arg	Gly	Pro	Ala	Gly	Pro	Pro	Gly	945	950	955
Gly	Pro	Gly	Asp	Lys	Gly	Asp	Pro	Gly	Glu	Asp	Gly	Gln	Pro	Gly	Pro	965	970	975
Asp	Gly	Pro	Pro	Gly	Pro	Ala	Gly	Thr	Thr	Gly	Gln	Arg	Gly	Ile	Val	980	985	990
Gly	Met	Pro	Gly	Gln	Arg	Gly	Glu	Arg	Gly	Met	Pro	Gly	Leu	Pro	Gly	995	1000	1005
Pro	Ala	Gly	Thr	Pro	Gly	Lys	Val	Gly	Pro	Thr	Gly	Ala	Thr	Gly	Asp	1010	1015	1020
Lys	Gly	Pro	Pro	Gly	Pro	Val	Gly	Pro	Pro	Gly	Ser	Asn	Gly	Pro	Val			

1025					1030					1035				1040	
Gly	Glu	Pro	Gly	Pro	Glu	Gly	Pro	Ala	Gly	Asn	Asp	Gly	Thr	Pro	Gly
				1045					1050					1055	
Arg	Asp	Gly	Ala	Val	Gly	Glu	Arg	Gly	Asp	Arg	Gly	Asp	Pro	Gly	Pro
			1060					1065					1070		
Ala	Gly	Leu	Pro	Gly	Ser	Gln	Gly	Ala	Pro	Gly	Thr	Pro	Gly	Pro	Val
		1075					1080					1085			
Gly	Ala	Pro	Gly	Asp	Ala	Gly	Gln	Arg	Gly	Asp	Pro	Gly	Ser	Arg	Gly
	1090					1095					1100				
Pro	Ile	Gly	His	Leu	Gly	Arg	Ala	Gly	Lys	Arg	Gly	Leu	Pro	Gly	Pro
1105					1110					1115					1120
Gln	Gly	Pro	Arg	Gly	Asp	Lys	Gly	Asp	His	Gly	Asp	Arg	Gly	Asp	Arg
			1125						1130					1135	
Gly	Gln	Lys	Gly	His	Arg	Gly	Phe	Thr	Gly	Leu	Gln	Gly	Leu	Pro	Gly
			1140					1145					1150		
Pro	Pro	Gly	Pro	Asn	Gly	Glu	Gln	Gly	Ser	Ala	Gly	Ile	Pro	Gly	Pro
		1155				1160						1165			
Phe	Gly	Pro	Arg	Gly	Pro	Pro	Gly	Pro	Val	Gly	Pro	Ser	Gly	Lys	Glu
	1170					1175					1180				
Gly	Asn	Pro	Gly	Pro	Leu	Gly	Pro	Leu	Gly	Pro	Pro	Gly	Val	Arg	Gly
1185					1190					1195					1200
Ser	Val	Gly	Glu	Ala	Gly	Pro	Glu	Gly	Pro	Pro	Gly	Glu	Pro	Gly	Pro
			1205						1210					1215	
Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	His	Leu	Thr	Ala	Ala	Leu	Gly	Asp
			1220					1225					1230		
Ile	Met	Gly	His	Tyr	Asp	Glu	Ser	Met	Pro	Asp	Pro	Leu	Pro	Glu	Phe
		1235					1240					1245			
Thr	Glu	Asp	Gln	Ala	Ala	Pro	Asp	Asp	Lys	Asn	Lys	Thr	Asp	Pro	Gly
	1250					1255						1260			
Val	His	Ala	Thr	Leu	Lys	Ser	Leu	Ser	Ser	Gln	Ile	Glu	Thr	Met	Arg
1265					1270					1275					1280
Ser	Pro	Asp	Gly	Ser	Lys	Lys	His	Pro	Ala	Arg	Thr	Cys	Asp	Asp	Leu
			1285						1290					1295	
Lys	Leu	Cys	His	Ser	Ala	Lys	Gln	Ser	Gly	Glu	Tyr	Trp	Ile	Asp	Pro
			1300					1305					1310		
Asn	Gln	Gly	Ser	Val	Glu	Asp	Ala	Ile	Lys	Val	Tyr	Cys	Asn	Met	Glu
		1315					1320					1325			
Thr	Gly	Glu	Thr	Cys	Ile	Ser	Ala	Asn	Pro	Ser	Ser	Val	Pro	Arg	Lys
	1330					1335						1340			
Thr	Trp	Trp	Ala	Ser	Lys	Ser	Pro	Asp	Asn	Lys	Pro	Val	Trp	Tyr	Gly
1345					1350					1355					1360
Leu	Asp	Met	Asn	Arg	Gly	Ser	Gln	Phe	Ala	Tyr	Gly	Asp	His	Gln	Ser
			1365					1370					1375		
Pro	Asn	Thr	Ala	Ile	Thr	Gln	Met	Thr	Phe	Leu	Arg	Leu	Leu	Ser	Lys
			1380					1385					1390		
Glu	Ala	Ser	Gln	Asn	Ile	Thr	Tyr	Ile	Cys	Lys	Asn	Ser	Val	Gly	Tyr
		1395					1400					1405			
Met	Asp	Asp	Gln	Ala	Lys	Asn	Leu	Lys	Lys	Ala	Val	Val	Leu	Lys	Gly
	1410					1415					1420				
Ala	Asn	Asp	Leu	Asp	Ile	Lys	Ala	Glu	Gly	Asn	Ile	Arg	Phe	Arg	Tyr
1425					1430					1435					1440
Ile	Val	Leu	Gln	Asp	Thr	Cys	Ser	Lys	Arg	Asn	Gly	Asn	Val	Gly	Lys
			1445						1450				1455		
Thr	Val	Phe	Glu	Tyr	Arg	Thr	Gln	Asn	Val	Ala	Arg	Leu	Pro	Ile	Ile
		1460						1465					1470		
Asp	Leu	Ala	Pro	Val	Asp	Val	Gly	Gly	Thr	Asp	Gln	Glu	Phe	Gly	Val
	1475						1480					1485			

Glu Ile Gly Pro Val Cys Phe Val
 1490 1495

<210> 105
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 105
 Met Ala Arg Ala Ala Leu Ser Ala Ala Pro Ser Asn Pro Arg Leu Leu
 1 5 10 15
 Arg Val Ala Leu Leu Leu Leu Leu Leu Val Ala Ala Gly Arg Arg Ala
 20 25 30
 Ala Gly Ala Ser Val Ala Thr Glu Leu Arg Cys Gln Cys Leu Gln Thr
 35 40 45
 Leu Gln Gly Ile His Pro Lys Asn Ile Gln Ser Val Asn Val Lys Ser
 50 55 60
 Pro Gly Pro His Cys Ala Gln Thr Glu Val Ile Ala Thr Leu Lys Asn
 65 70 75 80
 Gly Arg Lys Ala Cys Leu Asn Pro Ala Ser Pro Ile Val Lys Lys Ile
 85 90 95
 Ile Glu Lys Met Leu Asn Ser Asp Lys Ser Asn
 100 105

<210> 106
 <211> 89
 <212> PRT
 <213> Homo sapiens

<400> 106
 Met Lys Gly Leu Ala Ala Ala Leu Leu Val Leu Val Cys Thr Met Ala
 1 5 10 15
 Leu Cys Ser Cys Ala Gln Val Gly Thr Asn Lys Glu Leu Cys Cys Leu
 20 25 30
 Val Tyr Thr Ser Trp Gln Ile Pro Gln Lys Phe Ile Val Asp Tyr Ser
 35 40 45
 Glu Thr Ser Pro Gln Cys Pro Lys Pro Gly Val Ile Leu Leu Thr Lys
 50 55 60
 Arg Gly Arg Gln Ile Cys Ala Asp Pro Asn Lys Lys Trp Val Gln Lys
 65 70 75 80
 Tyr Ile Ser Asp Leu Lys Leu Asn Ala
 85

<210> 107
 <211> 796
 <212> PRT
 <213> Homo sapiens

<400> 107
 Met Lys Glu Asn Tyr Cys Leu Gln Ala Ala Leu Val Cys Leu Gly Met
 1 5 10 15
 Leu Cys His Ser His Ala Phe Ala Pro Glu Arg Arg Gly His Leu Arg
 20 25 30
 Pro Ser Phe His Gly His His Glu Lys Gly Lys Glu Gly Gln Val Leu

Cys	Glu	Ser	Asp	Gln	Thr	Lys	Pro	Leu	Ser	Asn	Gln	Pro	Ile	Val	Thr		
			500					505					510				
Ile	Ser	Ala	Asp	Asp	Lys	Asp	Asp	Thr	Ala	Asn	Gly	Pro	Arg	Phe	Ile		
		515					520					525					
Phe	Ser	Leu	Pro	Pro	Glu	Ile	Ile	His	Asn	Pro	Asn	Phe	Thr	Val	Arg		
	530					535					540						
Asp	Asn	Arg	Asp	Asn	Thr	Ala	Gly	Val	Tyr	Ala	Arg	Arg	Gly	Gly	Phe		
545					550					555					560		
Ser	Arg	Gln	Lys	Gln	Asp	Leu	Tyr	Leu	Leu	Pro	Ile	Val	Ile	Ser	Asp		
			565					570						575			
Gly	Gly	Ile	Pro	Pro	Met	Ser	Ser	Thr	Asn	Thr	Leu	Thr	Ile	Lys	Val		
			580					585					590				
Cys	Gly	Cys	Asp	Val	Asn	Gly	Ala	Leu	Leu	Ser	Cys	Asn	Ala	Glu	Ala		
		595					600					605					
Tyr	Ile	Leu	Asn	Ala	Gly	Leu	Ser	Thr	Gly	Ala	Leu	Ile	Ala	Ile	Leu		
	610					615					620						
Ala	Cys	Ile	Val	Ile	Leu	Leu	Val	Ile	Val	Val	Leu	Phe	Val	Thr	Leu		
625					630					635					640		
Arg	Arg	Gln	Lys	Lys	Glu	Pro	Leu	Ile	Val	Phe	Glu	Glu	Glu	Asp	Val		
			645						650					655			
Arg	Glu	Asn	Ile	Ile	Thr	Tyr	Asp	Asp	Glu	Gly	Gly	Gly	Glu	Glu	Asp		
		660					665						670				
Thr	Glu	Ala	Phe	Asp	Ile	Ala	Thr	Leu	Gln	Asn	Pro	Asp	Gly	Ile	Asn		
	675						680					685					
Gly	Phe	Ile	Pro	Arg	Lys	Asp	Ile	Lys	Pro	Glu	Tyr	Gln	Tyr	Met	Pro		
	690					695					700						
Arg	Pro	Gly	Leu	Arg	Pro	Ala	Pro	Asn	Ser	Val	Asp	Val	Asp	Asp	Phe		
705					710					715					720		
Ile	Asn	Thr	Arg	Ile	Gln	Glu	Ala	Asp	Asn	Asp	Pro	Thr	Ala	Pro	Pro		
			725						730					735			
Tyr	Asp	Ser	Ile	Gln	Ile	Tyr	Gly	Tyr	Glu	Gly	Arg	Gly	Ser	Val	Ala		
		740					745						750				
Gly	Ser	Leu	Ser	Ser	Leu	Glu	Ser	Ala	Thr	Thr	Asp	Ser	Asp	Leu	Asp		
	755					760					765						
Tyr	Asp	Tyr	Leu	Gln	Asn	Trp	Gly	Pro	Arg	Phe	Lys	Lys	Leu	Ala	Asp		
	770				775						780						
Leu	Tyr	Gly	Ser	Lys	Asp	Thr	Phe	Asp	Asp	Asp	Ser						
785					790					795							

<210> 108

<211> 180

<212> PRT

<213> Homo sapiens

<400> 108

Met	Ala	Ser	Thr	Ser	Tyr	Asp	Tyr	Cys	Arg	Val	Pro	Met	Glu	Asp	Gly		
1				5				10						15			
Asp	Lys	Arg	Cys	Lys	Leu	Leu	Leu	Gly	Ile	Gly	Ile	Leu	Val	Leu	Leu		
			20					25					30				
Ile	Ile	Val	Ile	Leu	Gly	Val	Pro	Leu	Ile	Ile	Phe	Thr	Ile	Lys	Ala		
		35					40					45					
Asn	Ser	Glu	Ala	Cys	Arg	Asp	Gly	Leu	Arg	Ala	Val	Met	Glu	Cys	Arg		
	50					55					60						
Asn	Val	Thr	His	Leu	Leu	Gln	Gln	Glu	Leu	Thr	Glu	Ala	Gln	Lys	Gly		
65				70						75				80			
Phe	Gln	Asp	Val	Glu	Ala	Gln	Ala	Ala	Thr	Cys	Asn	His	Thr	Val	Met		

				85					90				95			
Ala	Leu	Met	Ala	Ser	Leu	Asp	Ala	Glu	Lys	Ala	Gln	Gly	Gln	Lys	Lys	
			100					105					110			
Val	Glu	Glu	Leu	Glu	Gly	Glu	Ile	Thr	Thr	Leu	Asn	His	Lys	Leu	Gln	
		115					120					125				
Asp	Ala	Ser	Ala	Glu	Val	Glu	Arg	Leu	Arg	Arg	Glu	Asn	Gln	Val	Leu	
	130					135					140					
Ser	Val	Arg	Ile	Ala	Asp	Lys	Lys	Tyr	Tyr	Pro	Ser	Ser	Gln	Asp	Ser	
145					150					155					160	
Ser	Ser	Ala	Ala	Ala	Pro	Gln	Leu	Leu	Ile	Val	Leu	Leu	Gly	Leu	Ser	
			165					170						175		
Ala	Leu	Leu	Gln													
			180													

<210> 109

<211> 358

<212> PRT

<213> Homo sapiens

<400> 109

Met	Arg	Ala	Thr	Pro	Leu	Ala	Ala	Pro	Ala	Gly	Ser	Leu	Ser	Arg	Lys	
1				5					10					15		
Lys	Arg	Leu	Glu	Leu	Asp	Asp	Asn	Leu	Asp	Thr	Glu	Arg	Pro	Val	Gln	
		20						25					30			
Lys	Arg	Ala	Arg	Ser	Gly	Pro	Gln	Pro	Arg	Leu	Pro	Pro	Cys	Leu	Leu	
		35				40						45				
Pro	Leu	Ser	Pro	Pro	Thr	Ala	Pro	Asp	Arg	Ala	Thr	Ala	Val	Ala	Thr	
	50					55					60					
Ala	Ser	Arg	Leu	Gly	Pro	Tyr	Val	Leu	Leu	Glu	Pro	Glu	Glu	Gly	Gly	
65				70					75					80		
Arg	Ala	Tyr	Gln	Ala	Leu	His	Cys	Pro	Thr	Gly	Thr	Glu	Tyr	Thr	Cys	
			85						90					95		
Lys	Val	Tyr	Pro	Val	Gln	Glu	Ala	Pro	Ala	Val	Leu	Glu	Pro	Tyr	Ala	
			100					105					110			
Arg	Leu	Pro	Pro	His	Lys	His	Val	Ala	Arg	Pro	Thr	Glu	Val	Leu	Ala	
		115				120						125				
Gly	Thr	Gln	Leu	Leu	Tyr	Ala	Phe	Phe	Thr	Arg	Thr	His	Gly	Asp	Met	
	130					135					140					
His	Ser	Leu	Val	Arg	Ser	Arg	His	Arg	Ile	Pro	Glu	Pro	Glu	Ala	Ala	
145				150					155					160		
Val	Leu	Phe	Arg	Gln	Met	Ala	Thr	Ala	Leu	Ala	His	Cys	His	Gln	His	
			165					170						175		
Gly	Leu	Val	Leu	Arg	Asp	Leu	Lys	Leu	Cys	Arg	Phe	Val	Phe	Ala	Asp	
		180						185					190			
Arg	Glu	Arg	Lys	Lys	Leu	Val	Leu	Glu	Asn	Leu	Glu	Asp	Ser	Cys	Val	
		195				200						205				
Leu	Thr	Gly	Pro	Asp	Asp	Ser	Leu	Trp	Asp	Lys	His	Ala	Cys	Pro	Ala	
	210					215						220				
Tyr	Val	Gly	Pro	Glu	Ile	Leu	Ser	Ser	Arg	Ala	Ser	Tyr	Ser	Gly	Lys	
225				230						235					240	
Ala	Ala	Asp	Val	Trp	Ser	Leu	Gly	Val	Ala	Leu	Phe	Thr	Met	Leu	Ala	
			245					250						255		
Gly	His	Tyr	Pro	Phe	Gln	Asp	Ser	Glu	Pro	Val	Leu	Leu	Phe	Gly	Lys	
		260						265					270			
Ile	Arg	Arg	Gly	Ala	Tyr	Ala	Leu	Pro	Ala	Gly	Leu	Ser	Ala	Pro	Ala	
		275					280					285				

Arg	Cys	Leu	Val	Arg	Cys	Leu	Leu	Arg	Arg	Glu	Pro	Ala	Glu	Arg	Leu
290						295					300				
Thr	Ala	Thr	Gly	Ile	Leu	Leu	His	Pro	Trp	Leu	Arg	Gln	Asp	Pro	Met
305					310					315					320
Pro	Leu	Ala	Pro	Thr	Arg	Ser	His	Leu	Trp	Glu	Ala	Ala	Gln	Val	Val
				325					330					335	
Pro	Asp	Gly	Leu	Gly	Leu	Asp	Glu	Ala	Arg	Glu	Glu	Glu	Gly	Asp	Arg
			340					345					350		
Glu	Val	Val	Leu	Tyr	Gly										
			355												

<210> 110

<211> 1172

<212> PRT

<213> Homo sapiens

<400> 110

Met	Val	Trp	Arg	Leu	Val	Leu	Leu	Ala	Leu	Trp	Val	Trp	Pro	Ser	Thr
1				5					10					15	
Gln	Ala	Gly	His	Gln	Asp	Lys	Asp	Thr	Thr	Phe	Asp	Leu	Phe	Ser	Ile
			20					25					30		
Ser	Asn	Ile	Asn	Arg	Lys	Thr	Ile	Gly	Ala	Lys	Gln	Phe	Arg	Gly	Pro
		35					40					45			
Asp	Pro	Gly	Val	Pro	Ala	Tyr	Arg	Phe	Val	Arg	Phe	Asp	Tyr	Ile	Pro
	50					55					60				
Pro	Val	Asn	Ala	Asp	Asp	Leu	Ser	Lys	Ile	Thr	Lys	Ile	Met	Arg	Gln
65					70					75					80
Lys	Glu	Gly	Phe	Phe	Leu	Thr	Ala	Gln	Leu	Lys	Gln	Asp	Gly	Lys	Ser
				85					90					95	
Arg	Gly	Thr	Leu	Leu	Ala	Leu	Glu	Gly	Pro	Gly	Leu	Ser	Gln	Arg	Gln
			100					105					110		
Phe	Glu	Ile	Val	Ser	Asn	Gly	Pro	Ala	Asp	Thr	Leu	Asp	Leu	Thr	Tyr
		115					120					125			
Trp	Ile	Asp	Gly	Thr	Arg	His	Val	Val	Ser	Leu	Glu	Asp	Val	Gly	Leu
	130					135					140				
Ala	Asp	Ser	Gln	Trp	Lys	Asn	Val	Thr	Val	Gln	Val	Ala	Gly	Glu	Thr
145					150					155					160
Tyr	Ser	Leu	His	Val	Gly	Cys	Asp	Leu	Ile	Gly	Pro	Val	Ala	Leu	Asp
			165						170					175	
Glu	Pro	Phe	Tyr	Glu	His	Leu	Gln	Ala	Glu	Lys	Ser	Arg	Met	Tyr	Val
			180					185					190		
Ala	Lys	Gly	Ser	Ala	Arg	Glu	Ser	His	Phe	Arg	Gly	Leu	Leu	Gln	Asn
		195					200					205			
Val	His	Leu	Val	Phe	Glu	Asn	Ser	Val	Glu	Asp	Ile	Leu	Ser	Lys	Lys
	210					215					220				
Gly	Cys	Gln	Gln	Gly	Gln	Gly	Ala	Glu	Ile	Asn	Ala	Ile	Ser	Glu	Asn
225					230					235					240
Thr	Glu	Thr	Leu	Arg	Leu	Gly	Pro	His	Val	Thr	Thr	Glu	Tyr	Val	Gly
				245					250					255	
Pro	Ser	Ser	Glu	Arg	Arg	Pro	Glu	Val	Cys	Glu	Arg	Ser	Cys	Glu	Glu
			260				265						270		
Leu	Gly	Asn	Met	Val	Gln	Glu	Leu	Ser	Gly	Leu	His	Val	Leu	Val	Asn
		275				280					285				
Gln	Leu	Ser	Glu	Asn	Leu	Lys	Arg	Val	Ser	Asn	Asp	Asn	Gln	Phe	Leu
	290					295				300					
Trp	Glu	Leu	Ile	Gly	Gly	Pro	Pro	Lys	Thr	Arg	Asn	Met	Ser	Ala	Cys

305					310					315				320
Trp	Gln	Asp	Gly	Arg	Phe	Phe	Ala	Glu	Asn	Glu	Thr	Trp	Val	Val
				325					330					335
Ser	Cys	Thr	Thr	Cys	Thr	Cys	Lys	Lys	Phe	Lys	Thr	Ile	Cys	His
			340					345					350	Gln
Ile	Thr	Cys	Pro	Pro	Ala	Thr	Cys	Ala	Ser	Pro	Ser	Phe	Val	Glu
		355					360					365		Gly
Glu	Cys	Cys	Pro	Ser	Cys	Leu	His	Ser	Val	Asp	Gly	Glu	Glu	Gly
	370					375					380			Trp
Ser	Pro	Trp	Ala	Glu	Trp	Thr	Gln	Cys	Ser	Val	Thr	Cys	Gly	Ser
385					390					395				400
Thr	Gln	Gln	Arg	Gly	Arg	Ser	Cys	Asp	Val	Thr	Ser	Asn	Thr	Cys
			405					410					415	Leu
Gly	Pro	Ser	Ile	Gln	Thr	Arg	Ala	Cys	Ser	Leu	Ser	Lys	Cys	Asp
		420					425					430		Thr
Arg	Ile	Arg	Gln	Asp	Gly	Gly	Trp	Ser	His	Trp	Ser	Pro	Trp	Ser
	435					440					445			Ser
Cys	Ser	Val	Thr	Cys	Gly	Val	Gly	Asn	Ile	Thr	Arg	Ile	Arg	Leu
450					455			460						Cys
Asn	Ser	Pro	Val	Pro	Gln	Met	Gly	Gly	Lys	Asn	Cys	Lys	Gly	Ser
465				470				475						Gly
Arg	Glu	Thr	Lys	Ala	Cys	Gln	Gly	Ala	Pro	Cys	Pro	Ile	Asp	Gly
			485					490					495	Arg
Trp	Ser	Pro	Trp	Ser	Pro	Trp	Ser	Ala	Cys	Thr	Val	Thr	Cys	Ala
		500					505					510		Gly
Gly	Ile	Arg	Glu	Arg	Thr	Arg	Val	Cys	Asn	Ser	Pro	Glu	Pro	Gln
	515					520						525		Tyr
Gly	Gly	Lys	Ala	Cys	Val	Gly	Asp	Val	Gln	Glu	Arg	Gln	Met	Cys
	530				535			540						Asn
Lys	Arg	Ser	Cys	Pro	Val	Asp	Gly	Cys	Leu	Ser	Asn	Pro	Cys	Phe
545				550				555						Pro
Gly	Ala	Gln	Cys	Ser	Ser	Phe	Pro	Asp	Gly	Ser	Trp	Ser	Cys	Gly
			565				570						575	Phe
Cys	Pro	Val	Gly	Phe	Leu	Gly	Asn	Gly	Thr	His	Cys	Glu	Asp	Leu
		580				585					590			Asp
Glu	Cys	Ala	Leu	Val	Pro	Asp	Ile	Cys	Phe	Ser	Thr	Ser	Lys	Val
	595				600						605			Pro
Arg	Cys	Val	Asn	Thr	Gln	Pro	Gly	Phe	His	Cys	Leu	Pro	Cys	Pro
610					615						620			Pro
Arg	Tyr	Arg	Gly	Asn	Gln	Pro	Val	Gly	Val	Gly	Leu	Glu	Ala	Ala
625				630				635						Lys
Thr	Glu	Lys	Gln	Val	Cys	Glu	Pro	Glu	Asn	Pro	Cys	Lys	Asp	Lys
			645				650						655	Thr
His	Asn	Cys	His	Lys	His	Ala	Glu	Cys	Ile	Tyr	Leu	Gly	His	Phe
		660				665					670			Ser
Asp	Pro	Met	Tyr	Lys	Cys	Glu	Cys	Gln	Thr	Gly	Tyr	Ala	Gly	Asp
	675					680					685			Gly
Leu	Ile	Cys	Gly	Glu	Asp	Ser	Asp	Leu	Asp	Gly	Trp	Pro	Asn	Leu
	690				695					700				Asn
Leu	Val	Cys	Ala	Thr	Asn	Ala	Thr	Tyr	His	Cys	Ile	Lys	Asp	Asn
705				710				715						Cys
Pro	His	Leu	Pro	Asn	Ser	Gly	Gln	Glu	Asp	Phe	Asp	Lys	Asp	Gly
			725					730					735	Ile
Gly	Asp	Ala	Cys	Asp	Asp	Asp	Asp	Asp	Asn	Asp	Gly	Val	Thr	Asp
		740					745				750			Glu
Lys	Asp	Asn	Cys	Gln	Leu	Leu	Phe	Asn	Pro	Arg	Gln	Ala	Asp	Tyr
	755					760					765			Asp

Lys Asp Glu Val Gly Asp Arg Cys Asp Asn Cys Pro Tyr Val His Asn
 770 775 780
 Pro Ala Gln Ile Asp Thr Asp Asn Asn Gly Glu Gly Asp Ala Cys Ser
 785 790 795 800
 Val Asp Ile Asp Gly Asp Asp Val Phe Asn Glu Arg Asp Asn Cys Pro
 805 810 815
 Tyr Val Tyr Asn Thr Asp Gln Arg Asp Thr Asp Gly Asp Gly Val Gly
 820 825 830
 Asp His Cys Asp Asn Cys Pro Leu Val His Asn Pro Asp Gln Thr Asp
 835 840 845
 Val Asp Asn Asp Leu Val Gly Asp Gln Cys Asp Asn Asn Glu Asp Ile
 850 855 860
 Asp Asp Asp Gly His Gln Asn Asn Gln Asp Asn Cys Pro Tyr Ile Ser
 865 870 875 880
 Asn Ala Asn Gln Ala Asp His Asp Arg Asp Gly Gln Gly Asp Ala Cys
 885 890 895
 Asp Pro Asp Asp Asp Asn Asp Gly Val Pro Asp Asp Arg Asp Asn Cys
 900 905 910
 Arg Leu Val Phe Asn Pro Asp Gln Glu Asp Leu Asp Gly Asp Gly Arg
 915 920 925
 Gly Asp Ile Cys Lys Asp Asp Phe Asp Asn Asp Asn Ile Pro Asp Ile
 930 935 940
 Asp Asp Val Cys Pro Glu Asn Asn Ala Ile Ser Glu Thr Asp Phe Arg
 945 950 955 960
 Asn Phe Gln Met Val Pro Leu Asp Pro Lys Gly Thr Thr Gln Ile Asp
 965 970 975
 Pro Asn Trp Val Ile Arg His Gln Gly Lys Glu Leu Val Gln Thr Ala
 980 985 990
 Asn Ser Asp Pro Gly Ile Ala Val Gly Phe Asp Glu Phe Gly Ser Val
 995 1000 1005
 Asp Phe Ser Gly Thr Phe Tyr Val Asn Thr Asp Arg Asp Asp Asp Tyr
 1010 1015 1020
 Ala Gly Phe Val Phe Gly Tyr Gln Ser Ser Ser Arg Phe Tyr Val Val
 1025 1030 1035 1040
 Met Trp Lys Gln Val Thr Gln Thr Tyr Trp Glu Asp Gln Pro Thr Arg
 1045 1050 1055
 Ala Tyr Gly Tyr Ser Gly Val Ser Leu Lys Val Val Asn Ser Thr Thr
 1060 1065 1070
 Gly Thr Gly Glu His Leu Arg Asn Ala Leu Trp His Thr Gly Asn Thr
 1075 1080 1085
 Pro Gly Gln Val Arg Thr Leu Trp His Asp Pro Arg Asn Ile Gly Trp
 1090 1095 1100
 Lys Asp Tyr Thr Ala Tyr Arg Trp His Leu Thr His Arg Pro Lys Thr
 1105 1110 1115 1120
 Gly Tyr Ile Arg Val Leu Val His Glu Gly Lys Gln Val Met Ala Asp
 1125 1130 1135
 Ser Gly Pro Ile Tyr Asp Gln Thr Tyr Ala Gly Gly Arg Leu Gly Leu
 1140 1145 1150
 Phe Val Phe Ser Gln Glu Met Val Tyr Phe Ser Asp Leu Lys Tyr Glu
 1155 1160 1165
 Cys Arg Asp Ile
 1170

<210> 111
 <211> 138
 <212> PRT

<213> Homo sapiens

<400> 111

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Met Arg Gln Lys Ala Val Ser Leu Phe Leu Cys Tyr Leu Leu Leu Phe
 1          5          10          15
Thr Cys Ser Gly Val Glu Ala Gly Glu Asn Ala Gly Lys Asp Ala Gly
 20          25          30
Lys Lys Lys Cys Ser Glu Ser Ser Asp Ser Gly Ser Gly Phe Trp Lys
 35          40          45
Ala Leu Thr Phe Met Ala Val Gly Gly Gly Leu Ala Val Ala Gly Leu
 50          55          60
Pro Ala Leu Gly Phe Thr Gly Ala Gly Ile Ala Ala Asn Ser Val Ala
 65          70          75          80
Ala Ser Leu Met Ser Trp Ser Ala Ile Leu Asn Gly Gly Gly Val Pro
 85          90          95
Ala Gly Gly Leu Val Ala Thr Leu Gln Ser Leu Gly Ala Gly Gly Ser
 100          105          110
Ser Val Val Ile Gly Asn Ile Gly Ala Leu Met Gly Tyr Ala Thr His
 115          120          125
Lys Tyr Leu Asp Ser Glu Glu Asp Glu Glu
 130          135
```

<210> 112

<211> 184

<212> PRT

<213> Homo sapiens

<400> 112

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Met Ser Arg Thr Ala Tyr Thr Val Gly Ala Leu Leu Leu Leu Leu Gly
 1          5          10          15
Thr Leu Leu Pro Ala Ala Glu Gly Lys Lys Lys Gly Ser Gln Gly Ala
 20          25          30
Ile Pro Pro Pro Asp Lys Ala Gln His Asn Asp Ser Glu Gln Thr Gln
 35          40          45
Ser Pro Gln Gln Pro Gly Ser Arg Asn Arg Gly Arg Gly Gln Gly Arg
 50          55          60
Gly Thr Ala Met Pro Gly Glu Glu Val Leu Glu Ser Ser Gln Glu Ala
 65          70          75          80
Leu His Val Thr Glu Arg Lys Tyr Leu Lys Arg Asp Trp Cys Lys Thr
 85          90          95
Gln Pro Leu Lys Gln Thr Ile His Glu Gly Cys Asn Ser Arg Thr
 100          105          110
Ile Ile Asn Arg Phe Cys Tyr Gly Gln Cys Asn Ser Phe Tyr Ile Pro
 115          120          125
Arg His Ile Arg Lys Glu Glu Gly Ser Phe Gln Ser Cys Ser Phe Cys
 130          135          140
Lys Pro Lys Lys Phe Thr Thr Met Met Val Thr Leu Asn Cys Pro Glu
 145          150          155          160
Leu Gln Pro Pro Thr Lys Lys Lys Arg Val Thr Arg Val Lys Gln Cys
 165          170          175
Arg Cys Ile Ser Ile Asp Leu Asp
 180
```

<210> 113

<211> 707

<212> PRT
 <213> Homo sapiens

<400> 113

Met	Ser	Leu	Trp	Gln	Pro	Leu	Val	Leu	Val	Leu	Leu	Val	Leu	Gly	Cys
1				5				10						15	
Cys	Phe	Ala	Ala	Pro	Arg	Gln	Arg	Gln	Ser	Thr	Leu	Val	Leu	Phe	Pro
			20					25					30		
Gly	Asp	Leu	Arg	Thr	Asn	Leu	Thr	Asp	Arg	Gln	Leu	Ala	Glu	Glu	Tyr
		35					40					45			
Leu	Tyr	Arg	Tyr	Gly	Tyr	Thr	Arg	Val	Ala	Glu	Met	Arg	Gly	Glu	Ser
	50					55					60				
Lys	Ser	Leu	Gly	Pro	Ala	Leu	Leu	Leu	Leu	Gln	Lys	Gln	Leu	Ser	Leu
65					70					75					80
Pro	Glu	Thr	Gly	Glu	Leu	Asp	Ser	Ala	Thr	Leu	Lys	Ala	Met	Arg	Thr
				85					90					95	
Pro	Arg	Cys	Gly	Val	Pro	Asp	Leu	Gly	Arg	Phe	Gln	Thr	Phe	Glu	Gly
			100					105					110		
Asp	Leu	Lys	Trp	His	His	His	Asn	Ile	Thr	Tyr	Trp	Ile	Gln	Asn	Tyr
	115						120					125			
Ser	Glu	Asp	Leu	Pro	Arg	Ala	Val	Ile	Asp	Asp	Ala	Phe	Ala	Arg	Ala
	130					135					140				
Phe	Ala	Leu	Trp	Ser	Ala	Val	Thr	Pro	Leu	Thr	Phe	Thr	Arg	Val	Tyr
145					150					155					160
Ser	Arg	Asp	Ala	Asp	Ile	Val	Ile	Gln	Phe	Gly	Val	Ala	Glu	His	Gly
				165				170						175	
Asp	Gly	Tyr	Pro	Phe	Asp	Gly	Lys	Asp	Gly	Leu	Leu	Ala	His	Ala	Phe
			180					185					190		
Pro	Pro	Gly	Pro	Gly	Ile	Gln	Gly	Asp	Ala	His	Phe	Asp	Asp	Asp	Glu
		195					200					205			
Leu	Trp	Ser	Leu	Gly	Lys	Gly	Val	Val	Val	Pro	Thr	Arg	Phe	Gly	Asn
	210					215					220				
Ala	Asp	Gly	Ala	Ala	Cys	His	Phe	Pro	Phe	Ile	Phe	Glu	Gly	Arg	Ser
225					230					235					240
Tyr	Ser	Ala	Cys	Thr	Thr	Asp	Gly	Arg	Ser	Asp	Gly	Leu	Pro	Trp	Cys
				245				250						255	
Ser	Thr	Thr	Ala	Asn	Tyr	Asp	Thr	Asp	Asp	Arg	Phe	Gly	Phe	Cys	Pro
			260					265					270		
Ser	Glu	Arg	Leu	Tyr	Thr	Arg	Asp	Gly	Asn	Ala	Asp	Gly	Lys	Pro	Cys
	275						280					285			
Gln	Phe	Pro	Phe	Ile	Phe	Gln	Gly	Gln	Ser	Tyr	Ser	Ala	Cys	Thr	Thr
	290					295					300				
Asp	Gly	Arg	Ser	Asp	Gly	Tyr	Arg	Trp	Cys	Ala	Thr	Thr	Ala	Asn	Tyr
305					310					315					320
Asp	Arg	Asp	Lys	Leu	Phe	Gly	Phe	Cys	Pro	Thr	Arg	Ala	Asp	Ser	Thr
			325					330						335	
Val	Met	Gly	Gly	Asn	Ser	Ala	Gly	Glu	Leu	Cys	Val	Phe	Pro	Phe	Thr
			340					345					350		
Phe	Leu	Gly	Lys	Glu	Tyr	Ser	Thr	Cys	Thr	Ser	Glu	Gly	Arg	Gly	Asp
	355						360					365			
Gly	Arg	Leu	Trp	Cys	Ala	Thr	Thr	Ser	Asn	Phe	Asp	Ser	Asp	Lys	Lys
	370					375					380				
Trp	Gly	Phe	Cys	Pro	Asp	Gln	Gly	Tyr	Ser	Leu	Phe	Leu	Val	Ala	Ala
385					390					395					400
His	Glu	Phe	Gly	His	Ala	Leu	Gly	Leu	Asp	His	Ser	Ser	Val	Pro	Glu
				405					410					415	
Ala	Leu	Met	Tyr	Pro	Met	Tyr	Arg	Phe	Thr	Glu	Gly	Pro	Pro	Leu	His

			420					425					430				
Lys	Asp	Asp	Val	Asn	Gly	Ile	Arg	His	Leu	Tyr	Gly	Pro	Arg	Pro	Glu		
		435					440					445					
Pro	Glu	Pro	Arg	Pro	Pro	Thr	Thr	Thr	Thr	Pro	Gln	Pro	Thr	Ala	Pro		
	450					455					460						
Pro	Thr	Val	Cys	Pro	Thr	Gly	Pro	Pro	Thr	Val	His	Pro	Ser	Glu	Arg		
465					470					475					480		
Pro	Thr	Ala	Gly	Pro	Thr	Gly	Pro	Pro	Ser	Ala	Gly	Pro	Thr	Gly	Pro		
			485						490					495			
Pro	Thr	Ala	Gly	Pro	Ser	Thr	Ala	Thr	Thr	Val	Pro	Leu	Ser	Pro	Val		
		500					505					510					
Asp	Asp	Ala	Cys	Asn	Val	Asn	Ile	Phe	Asp	Ala	Ile	Ala	Glu	Ile	Gly		
		515				520						525					
Asn	Gln	Leu	Tyr	Leu	Phe	Lys	Asp	Gly	Lys	Tyr	Trp	Arg	Phe	Ser	Glu		
	530					535					540						
Gly	Arg	Gly	Ser	Arg	Pro	Gln	Gly	Pro	Phe	Leu	Ile	Ala	Asp	Lys	Trp		
545					550				555						560		
Pro	Ala	Leu	Pro	Arg	Lys	Leu	Asp	Ser	Val	Phe	Glu	Glu	Pro	Leu	Ser		
			565						570					575			
Lys	Lys	Leu	Phe	Phe	Phe	Ser	Gly	Arg	Gln	Val	Trp	Val	Tyr	Thr	Gly		
		580						585					590				
Ala	Ser	Val	Leu	Gly	Pro	Arg	Arg	Leu	Asp	Lys	Leu	Gly	Leu	Gly	Ala		
	595						600					605					
Asp	Val	Ala	Gln	Val	Thr	Gly	Ala	Leu	Arg	Ser	Gly	Arg	Gly	Lys	Met		
	610					615					620						
Leu	Leu	Phe	Ser	Gly	Arg	Arg	Leu	Trp	Arg	Phe	Asp	Val	Lys	Ala	Gln		
625					630					635					640		
Met	Val	Asp	Pro	Arg	Ser	Ala	Ser	Glu	Val	Asp	Arg	Met	Phe	Pro	Gly		
			645						650					655			
Val	Pro	Leu	Asp	Thr	His	Asp	Val	Phe	Gln	Tyr	Arg	Glu	Lys	Ala	Tyr		
		660						665					670				
Phe	Cys	Gln	Asp	Arg	Phe	Tyr	Trp	Arg	Val	Ser	Ser	Arg	Ser	Glu	Leu		
	675						680					685					
Asn	Gln	Val	Asp	Gln	Val	Gly	Tyr	Val	Thr	Tyr	Asp	Ile	Leu	Gln	Cys		
	690					695					700						
Pro	Glu	Asp															
705																	

<210> 114
 <211> 194
 <212> PRT
 <213> Homo sapiens

<400> 114																	
Met	Ala	Ile	Arg	Glu	Leu	Lys	Val	Cys	Leu	Leu	Gly	Asp	Thr	Gly	Val		
1				5				10						15			
Gly	Lys	Ser	Ser	Ile	Val	Cys	Arg	Phe	Val	Gln	Asp	His	Phe	Asp	His		
			20					25					30				
Asn	Ile	Ser	Pro	Thr	Ile	Gly	Ala	Ser	Phe	Met	Thr	Lys	Thr	Val	Pro		
		35					40					45					
Cys	Gly	Asn	Glu	Leu	His	Lys	Phe	Leu	Ile	Trp	Asp	Thr	Ala	Gly	Gln		
	50					55					60						
Glu	Arg	Phe	His	Ser	Leu	Ala	Pro	Met	Tyr	Tyr	Arg	Gly	Ser	Ala	Ala		
65					70					75					80		
Ala	Val	Ile	Val	Tyr	Asp	Ile	Thr	Lys	Gln	Asp	Ser	Phe	Tyr	Thr	Leu		
				85					90					95			

Lys Lys Trp Val Lys Glu Leu Lys Glu His Gly Pro Glu Asn Ile Val
 100 105 110
 Met Ala Ile Ala Gly Asn Lys Cys Asp Leu Ser Asp Ile Arg Glu Val
 115 120 125
 Pro Leu Lys Asp Ala Lys Glu Tyr Ala Glu Ser Ile Gly Ala Ile Val
 130 135 140
 Val Glu Thr Ser Ala Lys Asn Ala Ile Asn Ile Glu Glu Leu Phe Gln
 145 150 155 160
 Gly Ile Ser Arg Gln Ile Pro Pro Leu Asp Pro His Glu Asn Gly Asn
 165 170 175
 Asn Gly Thr Ile Lys Val Glu Lys Pro Thr Met Gln Ala Ser Arg Arg
 180 185 190
 Cys Cys

<210> 115
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 115
 Met Ser Ala Leu Ser Leu Leu Ile Leu Gly Leu Leu Thr Ala Val Pro
 1 5 10 15
 Pro Ala Ser Cys Gln Gln Gly Leu Gly Asn Leu Gln Pro Trp Met Gln
 20 25 30
 Gly Leu Ile Ala Val Ala Val Phe Leu Val Leu Val Ala Ile Ala Phe
 35 40 45
 Ala Val Asn His Phe Trp Cys Gln Glu Glu Pro Glu Pro Ala His Met
 50 55 60
 Ile Leu Thr Val Gly Asn Lys Ala Asp Gly Val Leu Val Gly Thr Asp
 65 70 75 80
 Gly Arg Tyr Ser Ser Met Ala Ala Ser Phe Arg Ser Ser Glu His Glu
 85 90 95
 Asn Ala Tyr Glu Asn Val Pro Glu Glu Glu Gly Lys Val Arg Ser Thr
 100 105 110
 Pro Met

<210> 116
 <211> 117
 <212> PRT
 <213> Homo sapiens

<400> 116
 Met Ala Leu Glu Thr Val Pro Lys Asp Leu Arg His Leu Arg Ala Cys
 1 5 10 15
 Leu Leu Cys Ser Leu Val Lys Thr Ile Asp Gln Phe Glu Tyr Asp Gly
 20 25 30
 Cys Asp Asn Cys Asp Ala Tyr Leu Gln Met Lys Gly Asn Arg Glu Met
 35 40 45
 Val Tyr Asp Cys Thr Ser Ser Ser Phe Asp Gly Ile Ile Ala Met Met
 50 55 60
 Ser Pro Glu Asp Ser Trp Val Ser Lys Trp Gln Arg Val Ser Asn Phe
 65 70 75 80
 Lys Pro Gly Val Tyr Ala Val Ser Val Thr Gly Arg Leu Pro Gln Gly

				85					90					95			
Ile	Val	Arg	Glu	Leu	Lys	Ser	Arg	Gly	Val	Ala	Tyr	Lys	Ser	Arg	Asp		
			100					105					110				
Thr	Ala	Ile	Lys	Thr													
			115														

<210> 117
 <211> 178
 <212> PRT
 <213> Homo sapiens

<400> 117																	
Met	Ser	Pro	Ser	Gly	Arg	Leu	Cys	Leu	Leu	Thr	Ile	Val	Gly	Leu	Ile		
1				5					10					15			
Leu	Pro	Thr	Arg	Gly	Gln	Thr	Leu	Lys	Asp	Thr	Thr	Ser	Ser	Ser	Ser		
			20					25					30				
Ala	Asp	Ser	Thr	Ile	Met	Asp	Ile	Gln	Val	Pro	Thr	Arg	Ala	Pro	Asp		
		35				40					45						
Ala	Val	Tyr	Thr	Glu	Leu	Gln	Pro	Thr	Ser	Pro	Thr	Pro	Thr	Trp	Pro		
	50				55					60							
Ala	Asp	Glu	Thr	Pro	Gln	Pro	Gln	Thr	Gln	Thr	Gln	Gln	Leu	Glu	Gly		
65					70				75					80			
Thr	Asp	Gly	Pro	Leu	Val	Thr	Asp	Pro	Glu	Thr	His	Lys	Ser	Thr	Lys		
				85					90					95			
Ala	Ala	His	Pro	Thr	Asp	Asp	Thr	Thr	Thr	Leu	Ser	Glu	Arg	Pro	Ser		
			100					105					110				
Pro	Ser	Thr	Asp	Val	Gln	Thr	Asp	Pro	Gln	Thr	Leu	Lys	Pro	Ser	Gly		
		115				120						125					
Phe	His	Glu	Asp	Asp	Pro	Phe	Phe	Tyr	Asp	Glu	His	Thr	Leu	Arg	Lys		
	130					135					140						
Arg	Gly	Leu	Leu	Val	Ala	Ala	Val	Leu	Phe	Ile	Thr	Gly	Ile	Ile	Ile		
145					150				155					160			
Leu	Thr	Ser	Gly	Lys	Cys	Arg	Gln	Leu	Ser	Arg	Leu	Cys	Arg	Asn	Arg		
				165				170						175			
Cys	Arg																

<210> 118
 <211> 3396
 <212> PRT
 <213> Homo sapiens

<400> 118																	
Met	Phe	Ile	Asn	Ile	Lys	Ser	Ile	Leu	Trp	Met	Cys	Ser	Thr	Leu	Ile		
1				5					10					15			
Val	Thr	His	Ala	Leu	His	Lys	Val	Lys	Val	Gly	Lys	Ser	Pro	Pro	Val		
			20					25					30				
Arg	Gly	Ser	Leu	Ser	Gly	Lys	Val	Ser	Leu	Pro	Cys	His	Phe	Ser	Thr		
		35				40					45						
Met	Pro	Thr	Leu	Pro	Pro	Ser	Tyr	Asn	Thr	Ser	Glu	Phe	Leu	Arg	Ile		
	50				55					60							
Lys	Trp	Ser	Lys	Ile	Glu	Val	Asp	Lys	Asn	Gly	Lys	Asp	Leu	Lys	Glu		
65					70				75					80			
Thr	Thr	Val	Leu	Val	Ala	Gln	Asn	Gly	Asn	Ile	Lys	Ile	Gly	Gln	Asp		
				85				90						95			

Tyr	Lys	Gly	Arg	Val	Ser	Val	Pro	Thr	His	Pro	Glu	Ala	Val	Gly	Asp	100	105	110
Ala	Ser	Leu	Thr	Val	Val	Lys	Leu	Leu	Ala	Ser	Asp	Ala	Gly	Leu	Tyr	115	120	125
Arg	Cys	Asp	Val	Met	Tyr	Gly	Ile	Glu	Asp	Thr	Gln	Asp	Thr	Val	Ser	130	135	140
Leu	Thr	Val	Asp	Gly	Val	Val	Phe	His	Tyr	Arg	Ala	Ala	Thr	Ser	Arg	145	150	155
Tyr	Thr	Leu	Asn	Phe	Glu	Ala	Ala	Gln	Lys	Ala	Cys	Leu	Asp	Val	Gly	165	170	175
Ala	Val	Ile	Ala	Thr	Pro	Glu	Gln	Leu	Phe	Ala	Ala	Tyr	Glu	Asp	Gly	180	185	190
Phe	Glu	Gln	Cys	Asp	Ala	Gly	Trp	Leu	Ala	Asp	Gln	Thr	Val	Arg	Tyr	195	200	205
Pro	Ile	Arg	Ala	Pro	Arg	Val	Gly	Cys	Tyr	Gly	Asp	Lys	Met	Gly	Lys	210	215	220
Ala	Gly	Val	Arg	Thr	Tyr	Gly	Phe	Arg	Ser	Pro	Gln	Glu	Thr	Tyr	Asp	225	230	235
Val	Tyr	Cys	Tyr	Val	Asp	His	Leu	Asp	Gly	Asp	Val	Phe	His	Leu	Thr	245	250	255
Val	Pro	Ser	Lys	Phe	Thr	Phe	Glu	Glu	Ala	Ala	Lys	Glu	Cys	Glu	Asn	260	265	270
Gln	Asp	Ala	Arg	Leu	Ala	Thr	Val	Gly	Glu	Leu	Gln	Ala	Ala	Trp	Arg	275	280	285
Asn	Gly	Phe	Asp	Gln	Cys	Asp	Tyr	Gly	Trp	Leu	Ser	Asp	Ala	Ser	Val	290	295	300
Arg	His	Pro	Val	Thr	Val	Ala	Arg	Ala	Gln	Cys	Gly	Gly	Gly	Leu	Leu	305	310	315
Gly	Val	Arg	Thr	Leu	Tyr	Arg	Phe	Glu	Asn	Gln	Thr	Gly	Phe	Pro	Pro	325	330	335
Pro	Asp	Ser	Arg	Phe	Asp	Ala	Tyr	Cys	Phe	Lys	Pro	Lys	Glu	Ala	Thr	340	345	350
Thr	Ile	Asp	Leu	Ser	Ile	Leu	Ala	Glu	Thr	Ala	Ser	Pro	Ser	Leu	Ser	355	360	365
Lys	Glu	Pro	Gln	Met	Val	Ser	Asp	Arg	Thr	Thr	Pro	Ile	Ile	Pro	Leu	370	375	380
Val	Asp	Glu	Leu	Pro	Val	Ile	Pro	Thr	Glu	Phe	Pro	Pro	Val	Gly	Asn	385	390	395
Ile	Val	Ser	Phe	Glu	Gln	Lys	Ala	Thr	Val	Gln	Pro	Gln	Ala	Ile	Thr	405	410	415
Asp	Ser	Leu	Ala	Thr	Lys	Leu	Pro	Thr	Pro	Thr	Gly	Ser	Thr	Lys	Lys	420	425	430
Pro	Trp	Asp	Met	Asp	Asp	Tyr	Ser	Pro	Ser	Ala	Ser	Gly	Pro	Leu	Gly	435	440	445
Lys	Leu	Asp	Ile	Ser	Glu	Ile	Lys	Glu	Glu	Val	Leu	Gln	Ser	Thr	Thr	450	455	460
Gly	Val	Ser	His	Tyr	Ala	Thr	Asp	Ser	Trp	Asp	Gly	Val	Val	Glu	Asp	465	470	475
Lys	Gln	Thr	Gln	Glu	Ser	Val	Thr	Gln	Ile	Glu	Gln	Ile	Glu	Val	Gly	485	490	495
Pro	Leu	Val	Thr	Ser	Met	Glu	Ile	Leu	Lys	His	Ile	Pro	Ser	Lys	Glu	500	505	510
Phe	Pro	Val	Thr	Glu	Thr	Pro	Leu	Val	Thr	Ala	Arg	Met	Ile	Leu	Glu	515	520	525
Ser	Lys	Thr	Glu	Lys	Lys	Met	Val	Ser	Thr	Val	Ser	Glu	Leu	Val	Thr	530	535	540
Thr	Gly	His	Tyr	Gly	Phe	Thr	Leu	Gly	Glu	Glu	Asp	Asp	Glu	Asp	Arg			

545					550					555					560
Thr	Leu	Thr	Val	Gly	Ser	Asp	Glu	Ser	Thr	Leu	Ile	Phe	Asp	Gln	Ile
				565					570					575	
Pro	Glu	Val	Ile	Thr	Val	Ser	Lys	Thr	Ser	Glu	Asp	Thr	Ile	His	Thr
			580					585					590		
His	Leu	Glu	Asp	Leu	Glu	Ser	Val	Ser	Ala	Ser	Thr	Thr	Val	Ser	Pro
		595					600					605			
Leu	Ile	Met	Pro	Asp	Asn	Asn	Gly	Ser	Ser	Met	Asp	Asp	Trp	Glu	Glu
	610					615				620					
Arg	Gln	Thr	Ser	Gly	Arg	Ile	Thr	Glu	Glu	Phe	Leu	Gly	Lys	Tyr	Leu
625					630					635					640
Ser	Thr	Thr	Pro	Phe	Pro	Ser	Gln	His	Arg	Thr	Glu	Ile	Glu	Leu	Phe
				645					650					655	
Pro	Tyr	Ser	Gly	Asp	Lys	Ile	Leu	Val	Glu	Gly	Ile	Ser	Thr	Val	Ile
			660				665					670			
Tyr	Pro	Ser	Leu	Gln	Thr	Glu	Met	Thr	His	Arg	Arg	Glu	Arg	Thr	Glu
		675				680						685			
Thr	Leu	Ile	Pro	Glu	Met	Arg	Thr	Asp	Thr	Tyr	Thr	Asp	Glu	Ile	Gln
	690					695					700				
Glu	Glu	Ile	Thr	Lys	Ser	Pro	Phe	Met	Gly	Lys	Thr	Glu	Glu	Glu	Val
705					710					715					720
Phe	Ser	Gly	Met	Lys	Leu	Ser	Thr	Ser	Leu	Ser	Glu	Pro	Ile	His	Val
				725					730					735	
Thr	Glu	Ser	Ser	Val	Glu	Met	Thr	Lys	Ser	Phe	Asp	Phe	Pro	Thr	Leu
			740					745					750		
Ile	Thr	Lys	Leu	Ser	Ala	Glu	Pro	Thr	Glu	Val	Arg	Asp	Met	Glu	Glu
		755					760					765			
Asp	Phe	Thr	Ala	Thr	Pro	Gly	Thr	Thr	Lys	Tyr	Asp	Glu	Asn	Ile	Thr
	770					775					780				
Thr	Val	Leu	Leu	Ala	His	Gly	Thr	Leu	Ser	Val	Glu	Ala	Ala	Thr	Val
785					790					795					800
Ser	Lys	Trp	Ser	Trp	Asp	Glu	Asp	Asn	Thr	Thr	Ser	Lys	Pro	Leu	Glu
				805					810					815	
Ser	Thr	Glu	Pro	Ser	Ala	Ser	Ser	Lys	Leu	Pro	Pro	Ala	Leu	Leu	Thr
			820					825					830		
Thr	Val	Gly	Met	Asn	Gly	Lys	Asp	Lys	Asp	Ile	Pro	Ser	Phe	Thr	Glu
		835					840					845			
Asp	Gly	Ala	Asp	Glu	Phe	Thr	Leu	Ile	Pro	Asp	Ser	Thr	Gln	Lys	Gln
	850					855				860					
Leu	Glu	Glu	Val	Thr	Asp	Glu	Asp	Ile	Ala	Ala	His	Gly	Lys	Phe	Thr
865					870					875					880
Ile	Arg	Phe	Gln	Pro	Thr	Thr	Ser	Thr	Gly	Ile	Ala	Glu	Lys	Ser	Thr
				885					890					895	
Leu	Arg	Asp	Ser	Thr	Thr	Glu	Glu	Lys	Val	Pro	Pro	Ile	Thr	Ser	Thr
			900					905					910		
Glu	Gly	Gln	Val	Tyr	Ala	Thr	Met	Glu	Gly	Ser	Ala	Leu	Gly	Glu	Val
		915					920					925			
Glu	Asp	Val	Asp	Leu	Ser	Lys	Pro	Val	Ser	Thr	Val	Pro	Gln	Phe	Ala
	930					935					940				
His	Thr	Ser	Glu	Val	Glu	Gly	Leu	Ala	Phe	Val	Ser	Tyr	Ser	Ser	Thr
945					950					955					960
Gln	Glu	Pro	Thr	Thr	Tyr	Val	Asp	Ser	Ser	His	Thr	Ile	Pro	Leu	Ser
				965					970					975	
Val	Ile	Pro	Lys	Thr	Asp	Trp	Gly	Val	Leu	Val	Pro	Ser	Val	Pro	Ser
			980					985					990		
Glu	Asp	Glu	Val	Leu	Gly	Glu	Pro	Ser	Gln	Asp	Ile	Leu	Val	Ile	Asp
		995					1000					1005			

Gln Thr Arg Leu Glu Ala Thr Ile Ser Pro Glu Thr Met Arg Thr Thr
 1010 1015 1020
 Lys Ile Thr Glu Gly Thr Thr Gln Glu Glu Phe Pro Trp Lys Glu Gln
 1025 1030 1035 1040
 Thr Ala Glu Lys Pro Val Pro Ala Leu Ser Ser Thr Ala Trp Thr Pro
 1045 1050 1055
 Lys Glu Ala Val Thr Pro Leu Asp Glu Gln Glu Gly Asp Gly Ser Ala
 1060 1065 1070
 Tyr Thr Val Ser Glu Asp Glu Leu Leu Thr Gly Ser Glu Arg Val Pro
 1075 1080 1085
 Val Leu Glu Thr Thr Pro Val Gly Lys Ile Asp His Ser Val Ser Tyr
 1090 1095 1100
 Pro Pro Gly Ala Val Thr Glu His Lys Val Lys Thr Asp Glu Val Val
 1105 1110 1115 1120
 Thr Leu Thr Pro Arg Ile Gly Pro Lys Val Ser Leu Ser Pro Gly Pro
 1125 1130 1135
 Glu Gln Lys Tyr Glu Thr Glu Gly Ser Ser Thr Thr Gly Phe Thr Ser
 1140 1145 1150
 Ser Leu Ser Pro Phe Ser Thr His Ile Thr Gln Leu Met Glu Glu Thr
 1155 1160 1165
 Thr Thr Glu Lys Thr Ser Leu Glu Asp Ile Asp Leu Gly Ser Gly Leu
 1170 1175 1180
 Phe Glu Lys Pro Lys Ala Thr Glu Leu Ile Glu Phe Ser Thr Ile Lys
 1185 1190 1195 1200
 Val Thr Val Pro Ser Asp Ile Thr Thr Ala Phe Ser Ser Val Asp Arg
 1205 1210 1215
 Leu His Thr Thr Ser Ala Phe Lys Pro Ser Ser Ala Ile Thr Lys Lys
 1220 1225 1230
 Pro Pro Leu Ile Asp Arg Glu Pro Gly Glu Glu Thr Thr Ser Asp Met
 1235 1240 1245
 Val Ile Ile Gly Glu Ser Thr Ser His Val Pro Pro Thr Thr Leu Glu
 1250 1255 1260
 Asp Ile Val Ala Lys Glu Thr Glu Thr Asp Ile Asp Arg Glu Tyr Phe
 1265 1270 1275 1280
 Thr Thr Ser Ser Pro Pro Ala Thr Gln Pro Thr Arg Pro Pro Thr Val
 1285 1290 1295
 Glu Asp Lys Glu Ala Phe Gly Pro Gln Ala Leu Ser Thr Pro Gln Pro
 1300 1305 1310
 Pro Ala Ser Thr Lys Phe His Pro Asp Ile Asn Val Tyr Ile Ile Glu
 1315 1320 1325
 Val Arg Glu Asn Lys Thr Gly Arg Met Ser Asp Leu Ser Val Ile Gly
 1330 1335 1340
 His Pro Ile Asp Ser Glu Ser Lys Glu Asp Glu Pro Cys Ser Glu Glu
 1345 1350 1355 1360
 Thr Asp Pro Val His Asp Leu Met Ala Glu Ile Leu Pro Glu Phe Pro
 1365 1370 1375
 Asp Ile Ile Glu Ile Asp Leu Tyr His Ser Glu Glu Asn Glu Glu Glu
 1380 1385 1390
 Glu Glu Glu Cys Ala Asn Ala Thr Asp Val Thr Thr Thr Pro Ser Val
 1395 1400 1405
 Gln Tyr Ile Asn Gly Lys His Leu Val Thr Thr Val Pro Lys Asp Pro
 1410 1415 1420
 Glu Ala Ala Glu Ala Arg Arg Gly Gln Phe Glu Ser Val Ala Pro Ser
 1425 1430 1435 1440
 Gln Asn Phe Ser Asp Ser Ser Glu Ser Asp Thr His Pro Phe Val Ile
 1445 1450 1455
 Ala Lys Thr Glu Leu Ser Thr Ala Val Gln Pro Asn Glu Ser Thr Glu

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2370	2375	2380
Asn Ser Ser Thr Ala Glu Ile Asn Glu Thr Thr Thr Ser Ser Thr Asp		
2385	2390	2395
Phe Leu Ala Arg Ala Tyr Gly Phe Glu Met Ala Lys Glu Phe Val Thr		2400
	2405	2410
Ser Ala Pro Lys Pro Ser Asp Leu Tyr Tyr Glu Pro Ser Gly Glu Gly		2415
	2420	2425
Ser Gly Glu Val Asp Ile Val Asp Ser Phe His Thr Ser Ala Thr Thr		2430
	2435	2440
Gln Ala Thr Arg Gln Glu Ser Ser Thr Thr Phe Val Ser Asp Gly Ser		2445
	2450	2455
Leu Glu Lys His Pro Glu Val Pro Ser Ala Lys Ala Val Thr Ala Asp		2460
2465	2470	2475
Gly Phe Pro Thr Val Ser Val Met Leu Pro Leu His Ser Glu Gln Asn		2480
	2485	2490
Lys Ser Ser Pro Asp Pro Thr Ser Thr Leu Ser Asn Thr Val Ser Tyr		2495
	2500	2505
Glu Arg Ser Thr Asp Gly Ser Phe Gln Asp Arg Phe Arg Glu Phe Glu		2510
	2515	2520
Asp Ser Thr Leu Lys Pro Asn Arg Lys Lys Pro Thr Glu Asn Ile Ile		2525
	2530	2535
Ile Asp Leu Asp Lys Glu Asp Lys Asp Leu Ile Leu Thr Ile Thr Glu		2540
2545	2550	2555
Ser Thr Ile Leu Glu Ile Leu Pro Glu Leu Thr Ser Asp Lys Asn Thr		2560
	2565	2570
Ile Ile Asp Ile Asp His Thr Lys Pro Val Tyr Glu Asp Ile Leu Gly		2575
	2580	2585
Met Gln Thr Asp Ile Asp Thr Glu Val Pro Ser Glu Pro His Asp Ser		2590
	2595	2600
Asn Asp Glu Ser Asn Asp Asp Ser Thr Gln Val Gln Glu Ile Tyr Glu		2605
	2610	2615
Ala Ala Val Asn Leu Ser Leu Thr Glu Glu Thr Phe Glu Gly Ser Ala		2620
2625	2630	2635
Asp Val Leu Ala Ser Tyr Thr Gln Ala Thr His Asp Glu Ser Met Thr		2640
	2645	2650
Tyr Glu Asp Arg Ser Gln Leu Asp His Met Gly Phe His Phe Thr Thr		2655
	2660	2665
Gly Ile Pro Ala Pro Ser Thr Glu Thr Glu Leu Asp Val Leu Leu Pro		2670
	2675	2680
Thr Ala Thr Ser Leu Pro Ile Pro Arg Lys Ser Ala Thr Val Ile Pro		2685
	2690	2695
Glu Ile Glu Gly Ile Lys Ala Glu Ala Lys Ala Leu Asp Asp Met Phe		2700
2705	2710	2715
Glu Ser Ser Thr Leu Ser Asp Gly Gln Ala Ile Ala Asp Gln Ser Glu		2720
	2725	2730
Ile Ile Pro Thr Leu Gly Gln Phe Glu Arg Thr Gln Glu Glu Tyr Glu		2735
	2740	2745
Asp Lys Lys His Ala Gly Pro Ser Phe Gln Pro Glu Phe Ser Ser Gly		2750
	2755	2760
Ala Glu Glu Ala Leu Val Asp His Thr Pro Tyr Leu Ser Ile Ala Thr		2765
	2770	2775
Thr His Leu Met Asp Gln Ser Val Thr Glu Val Pro Asp Val Met Glu		2780
2785	2790	2795
Gly Ser Asn Pro Pro Tyr Tyr Thr Asp Thr Thr Leu Ala Val Ser Thr		2800
	2805	2810
Phe Ala Lys Leu Ser Ser Gln Thr Pro Ser Ser Pro Leu Thr Ile Tyr		2815
	2820	2825
		2830

Ser Gly Ser Glu Ala Ser Gly His Thr Glu Ile Pro Gln Pro Ser Ala
2835 2840 2845
Leu Pro Gly Ile Asp Val Gly Ser Ser Val Met Ser Pro Gln Asp Ser
2850 2855 2860
Phe Lys Glu Ile His Val Asn Ile Glu Ala Thr Phe Lys Pro Ser Ser
2865 2870 2875 2880
Glu Glu Tyr Leu His Ile Thr Glu Pro Pro Ser Leu Ser Pro Asp Thr
2885 2890 2895
Lys Leu Glu Pro Ser Glu Asp Asp Gly Lys Pro Glu Leu Leu Glu Glu
2900 2905 2910
Met Glu Ala Ser Pro Thr Glu Leu Ile Ala Val Glu Gly Thr Glu Ile
2915 2920 2925
Leu Gln Asp Phe Gln Asn Lys Thr Asp Gly Gln Val Ser Gly Glu Ala
2930 2935 2940
Ile Lys Met Phe Pro Thr Ile Lys Thr Pro Glu Ala Gly Thr Val Ile
2945 2950 2955 2960
Thr Thr Ala Asp Glu Ile Glu Leu Glu Gly Ala Thr Gln Trp Pro His
2965 2970 2975
Ser Thr Ser Ala Ser Ala Thr Tyr Gly Val Glu Ala Gly Val Val Pro
2980 2985 2990
Trp Leu Ser Pro Gln Thr Ser Glu Arg Pro Thr Leu Ser Ser Ser Pro
2995 3000 3005
Glu Ile Asn Pro Glu Thr Gln Ala Ala Leu Ile Arg Gly Gln Asp Ser
3010 3015 3020
Thr Ile Ala Ala Ser Glu Gln Gln Val Ala Ala Arg Ile Leu Asp Ser
3025 3030 3035 3040
Asn Asp Gln Ala Thr Val Asn Pro Val Glu Phe Asn Thr Glu Val Ala
3045 3050 3055
Thr Pro Pro Phe Ser Leu Leu Glu Thr Ser Asn Glu Thr Asp Phe Leu
3060 3065 3070
Ile Gly Ile Asn Glu Glu Ser Val Glu Gly Thr Ala Ile Tyr Leu Pro
3075 3080 3085
Gly Pro Asp Arg Cys Lys Met Asn Pro Cys Leu Asn Gly Gly Thr Cys
3090 3095 3100
Tyr Pro Thr Glu Thr Ser Tyr Val Cys Thr Cys Val Pro Gly Tyr Ser
3105 3110 3115 3120
Gly Asp Gln Cys Glu Leu Asp Phe Asp Glu Cys His Ser Asn Pro Cys
3125 3130 3135
Arg Asn Gly Ala Thr Cys Val Asp Gly Phe Asn Thr Phe Arg Cys Leu
3140 3145 3150
Cys Leu Pro Ser Tyr Val Gly Ala Leu Cys Glu Gln Asp Thr Glu Thr
3155 3160 3165
Cys Asp Tyr Gly Trp His Lys Phe Gln Gly Gln Cys Tyr Lys Tyr Phe
3170 3175 3180
Ala His Arg Arg Thr Trp Asp Ala Ala Glu Arg Glu Cys Arg Leu Gln
3185 3190 3195 3200
Gly Ala His Leu Thr Ser Ile Leu Ser His Glu Glu Gln Met Phe Val
3205 3210 3215
Asn Arg Val Gly His Asp Tyr Gln Trp Ile Gly Leu Asn Asp Lys Met
3220 3225 3230
Phe Glu His Asp Phe Arg Trp Thr Asp Gly Ser Thr Leu Gln Tyr Glu
3235 3240 3245
Asn Trp Arg Pro Asn Gln Pro Asp Ser Phe Phe Ser Ala Gly Glu Asp
3250 3255 3260
Cys Val Val Ile Ile Trp His Glu Asn Gly Gln Trp Asn Asp Val Pro
3265 3270 3275 3280
Cys Asn Tyr His Leu Thr Tyr Thr Cys Lys Lys Gly Thr Val Ala Cys

				3285					3290					3295					
Gly	Gln	Pro	Pro	Val	Val	Glu	Asn	Ala	Lys	Thr	Phe	Gly	Lys	Met	Lys				
			3300					3305						3310					
Pro	Arg	Tyr	Glu	Ile	Asn	Ser	Leu	Ile	Arg	Tyr	His	Cys	Lys	Asp	Gly				
		3315					3320					3325							
Phe	Ile	Gln	Arg	His	Leu	Pro	Thr	Ile	Arg	Cys	Leu	Gly	Asn	Gly	Arg				
	3330					3335					3340								
Trp	Ala	Ile	Pro	Lys	Ile	Thr	Cys	Met	Asn	Pro	Ser	Ala	Tyr	Gln	Arg				
3345					3350				3355					3360					
Thr	Tyr	Ser	Met	Lys	Tyr	Phe	Lys	Asn	Ser	Ser	Ser	Ala	Lys	Asp	Asn				
			3365					3370					3375						
Ser	Ile	Asn	Thr	Ser	Lys	His	Asp	His	Arg	Trp	Ser	Arg	Arg	Trp	Gln				
		3380					3385					3390							
Glu	Ser	Arg	Arg																
		3395																	

<210> 119
 <211> 317
 <212> PRT
 <213> Homo sapiens

<400> 119

Met	Thr	Ser	Arg	Thr	Arg	Val	Thr	Trp	Pro	Ser	Pro	Pro	Arg	Pro	Leu				
1				5					10					15					
Pro	Val	Pro	Ala	Ala	Ala	Ala	Val	Ala	Phe	Gly	Ala	Lys	Gly	Thr	Asp				
			20					25					30						
Pro	Ala	Glu	Ala	Arg	Ser	Ser	Arg	Gly	Ile	Glu	Glu	Ala	Gly	Pro	Arg				
		35					40					45							
Ala	His	Gly	Arg	Ala	Gly	Arg	Glu	Pro	Glu	Arg	Arg	Arg	Ser	Arg	Gln				
	50					55					60								
Gln	Arg	Arg	Gly	Gly	Leu	Gln	Ala	Arg	Arg	Ser	Thr	Leu	Leu	Lys	Thr				
65					70				75					80					
Cys	Ala	Arg	Ala	Arg	Ala	Thr	Ala	Pro	Gly	Ala	Met	Lys	Met	Val	Ala				
				85				90					95						
Pro	Trp	Thr	Arg	Phe	Tyr	Ser	Asn	Ser	Cys	Cys	Leu	Cys	Cys	His	Val				
			100					105					110						
Arg	Thr	Gly	Thr	Ile	Leu	Leu	Gly	Val	Trp	Tyr	Leu	Ile	Ile	Asn	Ala				
		115					120					125							
Val	Val	Leu	Leu	Ile	Leu	Leu	Ser	Ala	Leu	Ala	Asp	Pro	Asp	Gln	Tyr				
	130					135					140								
Asn	Phe	Ser	Ser	Ser	Glu	Leu	Gly	Gly	Asp	Phe	Glu	Phe	Met	Asp	Asp				
145					150				155					160					
Ala	Asn	Met	Cys	Ile	Ala	Ile	Ala	Ile	Ser	Leu	Leu	Met	Ile	Leu	Ile				
				165				170					175						
Cys	Ala	Met	Ala	Thr	Tyr	Gly	Ala	Tyr	Lys	Gln	Arg	Ala	Ala	Trp	Ile				
			180					185					190						
Ile	Pro	Phe	Phe	Cys	Tyr	Gln	Ile	Phe	Asp	Phe	Ala	Leu	Asn	Met	Leu				
		195					200					205							
Val	Ala	Ile	Thr	Val	Leu	Ile	Tyr	Pro	Asn	Ser	Ile	Gln	Glu	Tyr	Ile				
	210					215					220								
Arg	Gln	Leu	Pro	Pro	Asn	Phe	Pro	Tyr	Arg	Asp	Asp	Val	Met	Ser	Val				
225					230				235					240					
Asn	Pro	Thr	Cys	Leu	Val	Leu	Ile	Ile	Leu	Leu	Phe	Ile	Ser	Ile	Ile				
			245					250					255						
Leu	Thr	Phe	Lys	Gly	Tyr	Leu	Ile	Ser	Cys	Val	Trp	Asn	Cys	Tyr	Arg				
		260						265					270						

Tyr	Ile	Asn	Gly	Arg	Asn	Ser	Ser	Asp	Val	Leu	Val	Tyr	Val	Thr	Ser
		275					280					285			
Asn	Asp	Thr	Thr	Val	Leu	Leu	Pro	Pro	Tyr	Asp	Asp	Ala	Thr	Val	Asn
	290					295					300				
Gly	Ala	Ala	Lys	Glu	Pro	Pro	Pro	Pro	Tyr	Val	Ser	Ala			
305					310					315					

<210> 120

<211> 474

<212> PRT

<213> Homo sapiens

<400> 120

Met	Val	Gln	Gln	Thr	Asn	Asn	Ala	Glu	Asn	Thr	Glu	Ala	Leu	Leu	Ala
1				5				10					15		
Gly	Glu	Ser	Ser	Asp	Ser	Gly	Ala	Gly	Leu	Glu	Leu	Gly	Ile	Ala	Ser
			20					25					30		
Ser	Pro	Thr	Pro	Gly	Ser	Thr	Ala	Ser	Thr	Gly	Gly	Lys	Ala	Asp	Asp
		35					40					45			
Pro	Ser	Trp	Cys	Lys	Thr	Pro	Ser	Gly	His	Ile	Lys	Arg	Pro	Met	Asn
	50					55					60				
Ala	Phe	Met	Val	Trp	Ser	Gln	Ile	Glu	Arg	Arg	Lys	Ile	Met	Glu	Gln
65					70				75					80	
Ser	Pro	Asp	Met	His	Asn	Ala	Glu	Ile	Ser	Lys	Arg	Leu	Gly	Lys	Arg
				85					90					95	
Trp	Lys	Leu	Leu	Lys	Asp	Ser	Asp	Lys	Ile	Pro	Phe	Ile	Arg	Glu	Ala
			100					105					110		
Glu	Arg	Leu	Arg	Leu	Lys	His	Met	Ala	Asp	Tyr	Pro	Asp	Tyr	Lys	Tyr
			115				120					125			
Arg	Pro	Arg	Lys	Lys	Val	Lys	Ser	Gly	Asn	Ala	Asn	Ser	Ser	Ser	Ser
	130					135					140				
Ala	Ala	Ala	Ser	Ser	Lys	Pro	Gly	Glu	Lys	Gly	Asp	Lys	Val	Gly	Gly
145					150					155				160	
Ser	Gly	Gly	Gly	Gly	His	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Ser	Ser
				165				170						175	
Ala	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Ala	Ser	Gly	Gly	Gly	Ala	Asn	Ser
			180					185					190		
Pro	Ala	Gln	Lys	Lys	Ser	Cys	Gly	Ser	Lys	Val	Ala	Gly	Gly	Ala	Gly
		195					200					205			
Gly	Gly	Val	Ser	Lys	Pro	His	Ala	Lys	Leu	Ile	Leu	Ala	Gly	Gly	Gly
	210					215					220				
Gly	Gly	Gly	Lys	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ser	Phe	Ala	Ala	Glu
225					230					235				240	
Gln	Ala	Gly	Ala	Ala	Ala	Leu	Leu	Pro	Leu	Gly	Ala	Ala	Ala	Asp	His
				245					250					255	
His	Ser	Leu	Tyr	Lys	Ala	Arg	Thr	Pro	Ser	Ala	Ser	Ala	Ser	Ala	Ser
			260					265					270		
Ser	Ala	Ala	Ser	Ala	Ser	Ala	Ala	Leu	Ala	Ala	Pro	Gly	Lys	His	Leu
		275					280					285			
Ala	Glu	Lys	Lys	Val	Lys	Arg	Val	Tyr	Leu	Phe	Gly	Gly	Leu	Gly	Thr
	290					295					300				
Ser	Ser	Ser	Pro	Val	Gly	Gly	Val	Gly	Ala	Gly	Ala	Asp	Pro	Ser	Asp
305					310					315				320	
Pro	Leu	Gly	Leu	Tyr	Glu	Glu	Glu	Gly	Ala	Gly	Cys	Ser	Pro	Asp	Ala
				325					330					335	
Pro	Ser	Leu	Ser	Gly	Arg	Ser	Ser	Ala	Ala	Ser	Ser	Pro	Ala	Ala	Gly

Ile	Gln	Ala	Gly	Ile	Tyr	Ala	Thr	Arg	Ser	Gly	Gly	Thr	Leu	Val	Leu		
			260					265					270				
Val	Gly	Leu	Gly	Ser	Glu	Met	Thr	Thr	Val	Pro	Leu	Leu	His	Ala	Ala		
		275					280					285					
Ile	Arg	Glu	Val	Asp	Ile	Lys	Gly	Val	Phe	Arg	Tyr	Cys	Asn	Thr	Trp		
	290					295					300						
Pro	Val	Ala	Ile	Ser	Met	Leu	Ala	Ser	Lys	Ser	Val	Asn	Val	Lys	Pro		
305					310					315					320		
Leu	Val	Thr	His	Arg	Phe	Pro	Leu	Glu	Lys	Ala	Leu	Glu	Ala	Phe	Glu		
			325					330						335			
Thr	Phe	Lys	Lys	Gly	Leu	Gly	Leu	Lys	Ile	Met	Leu	Lys	Cys	Asp	Pro		
		340					345						350				
Ser	Asp	Gln	Asn	Pro													
		355															

<210> 122
 <211> 470
 <212> PRT
 <213> Homo sapiens

<400> 122

Met	Lys	Phe	Leu	Leu	Ile	Leu	Leu	Leu	Gln	Ala	Thr	Ala	Ser	Gly	Ala		
1			5					10						15			
Leu	Pro	Leu	Asn	Ser	Ser	Thr	Ser	Leu	Glu	Lys	Asn	Asn	Val	Leu	Phe		
		20					25					30					
Gly	Glu	Arg	Tyr	Leu	Glu	Lys	Phe	Tyr	Gly	Leu	Glu	Ile	Asn	Lys	Leu		
		35				40					45						
Pro	Val	Thr	Lys	Met	Lys	Tyr	Ser	Gly	Asn	Leu	Met	Lys	Glu	Lys	Ile		
	50				55				60								
Gln	Glu	Met	Gln	His	Phe	Leu	Gly	Leu	Lys	Val	Thr	Gly	Gln	Leu	Asp		
65			70					75						80			
Thr	Ser	Thr	Leu	Glu	Met	Met	His	Ala	Pro	Arg	Cys	Gly	Val	Pro	Asp		
		85					90					95					
Leu	His	His	Phe	Arg	Glu	Met	Pro	Gly	Gly	Pro	Val	Trp	Arg	Lys	His		
		100					105					110					
Tyr	Ile	Thr	Tyr	Arg	Ile	Asn	Asn	Tyr	Thr	Pro	Asp	Met	Asn	Arg	Glu		
	115					120					125						
Asp	Val	Asp	Tyr	Ala	Ile	Arg	Lys	Ala	Phe	Gln	Val	Trp	Ser	Asn	Val		
	130				135			140									
Thr	Pro	Leu	Lys	Phe	Ser	Lys	Ile	Asn	Thr	Gly	Met	Ala	Asp	Ile	Leu		
145			150					155						160			
Val	Val	Phe	Ala	Arg	Gly	Ala	His	Gly	Asp	Phe	His	Ala	Phe	Asp	Gly		
		165					170					175					
Lys	Gly	Gly	Ile	Leu	Ala	His	Ala	Phe	Gly	Pro	Gly	Ser	Gly	Ile	Gly		
		180					185					190					
Gly	Asp	Ala	His	Phe	Asp	Glu	Asp	Glu	Phe	Trp	Thr	Thr	His	Ser	Gly		
	195					200					205						
Gly	Thr	Asn	Leu	Phe	Leu	Thr	Ala	Val	His	Glu	Ile	Gly	His	Ser	Leu		
	210					215					220						
Gly	Leu	Gly	His	Ser	Ser	Asp	Pro	Lys	Ala	Val	Met	Phe	Pro	Thr	Tyr		
225			230					235						240			
Lys	Tyr	Val	Asp	Ile	Asn	Thr	Phe	Arg	Leu	Ser	Ala	Asp	Asp	Ile	Arg		
		245					250					255					
Gly	Ile	Gln	Ser	Leu	Tyr	Gly	Asp	Pro	Lys	Glu	Asn	Gln	Arg	Leu	Pro		
		260					265					270					
Asn	Pro	Asp	Asn	Ser	Glu	Pro	Ala	Leu	Cys	Asp	Pro	Asn	Leu	Ser	Phe		

<210> 124
 <211> 2828
 <212> PRT
 <213> Homo sapiens

<400> 124

Met	Pro	Lys	Arg	Ala	His	Trp	Gly	Ala	Leu	Ser	Val	Val	Leu	Ile	Leu
1				5					10					15	
Leu	Trp	Gly	His	Pro	Arg	Val	Ala	Leu	Ala	Cys	Pro	His	Pro	Cys	Ala
			20					25					30		
Cys	Tyr	Val	Pro	Ser	Glu	Val	His	Cys	Thr	Phe	Arg	Ser	Leu	Ala	Ser
		35					40					45			
Val	Pro	Ala	Gly	Ile	Ala	Arg	His	Val	Glu	Arg	Ile	Asn	Leu	Gly	Phe
	50					55					60				
Asn	Ser	Ile	Gln	Ala	Leu	Ser	Glu	Thr	Ser	Phe	Ala	Gly	Leu	Thr	Lys
65					70					75					80
Leu	Glu	Leu	Leu	Met	Ile	His	Gly	Asn	Glu	Ile	Pro	Ser	Ile	Pro	Asp
				85					90					95	
Gly	Ala	Leu	Arg	Asp	Leu	Ser	Ser	Leu	Gln	Val	Phe	Lys	Phe	Ser	Tyr
			100					105					110		
Asn	Lys	Leu	Arg	Val	Ile	Thr	Gly	Gln	Thr	Leu	Gln	Gly	Leu	Ser	Asn
		115					120					125			
Leu	Met	Arg	Leu	His	Ile	Asp	His	Asn	Lys	Ile	Glu	Phe	Ile	His	Pro
	130					135					140				
Gln	Ala	Phe	Asn	Gly	Leu	Thr	Ser	Leu	Arg	Leu	Leu	His	Leu	Glu	Gly
145					150					155					160
Asn	Leu	Leu	His	Gln	Leu	His	Pro	Ser	Thr	Phe	Ser	Thr	Phe	Thr	Phe
			165						170					175	
Leu	Asp	Tyr	Phe	Arg	Leu	Ser	Thr	Ile	Arg	His	Leu	Tyr	Leu	Ala	Glu
			180					185					190		
Asn	Met	Val	Arg	Thr	Leu	Pro	Ala	Ser	Met	Leu	Arg	Asn	Met	Pro	Leu
		195					200					205			
Leu	Glu	Asn	Leu	Tyr	Leu	Gln	Gly	Asn	Pro	Trp	Thr	Cys	Asp	Cys	Glu
	210					215					220				
Met	Arg	Trp	Phe	Leu	Glu	Trp	Asp	Ala	Lys	Ser	Arg	Gly	Ile	Leu	Lys
225					230					235					240
Cys	Lys	Lys	Asp	Lys	Ala	Tyr	Glu	Gly	Gly	Gln	Leu	Cys	Ala	Met	Cys
			245						250					255	
Phe	Ser	Pro	Lys	Lys	Leu	Tyr	Lys	His	Glu	Ile	His	Lys	Leu	Lys	Asp
			260					265					270		
Met	Thr	Cys	Leu	Lys	Pro	Ser	Ile	Glu	Ser	Pro	Leu	Arg	Gln	Asn	Arg
		275					280					285			
Ser	Arg	Ser	Ile	Glu	Glu	Glu	Gln	Glu	Gln	Glu	Glu	Asp	Gly	Gly	Ser
	290					295					300				
Gln	Leu	Ile	Leu	Glu	Lys	Phe	Gln	Leu	Pro	Gln	Trp	Ser	Ile	Ser	Leu
305					310					315					320
Asn	Met	Thr	Asp	Glu	His	Gly	Asn	Met	Val	Asn	Leu	Val	Cys	Asp	Ile
			325						330					335	
Lys	Lys	Pro	Met	Asp	Val	Tyr	Lys	Ile	His	Leu	Asn	Gln	Thr	Asp	Pro
			340					345					350		
Pro	Asp	Ile	Asp	Ile	Asn	Ala	Thr	Val	Ala	Leu	Asp	Phe	Glu	Cys	Pro
		355					360					365			
Met	Thr	Arg	Glu	Asn	Tyr	Glu	Lys	Leu	Trp	Lys	Leu	Ile	Ala	Tyr	Tyr
	370					375					380				
Ser	Glu	Val	Pro	Val	Lys	Leu	His	Arg	Glu	Leu	Met	Leu	Ser	Lys	Asp
385					390					395					400
Pro	Arg	Val	Ser	Tyr	Gln	Tyr	Arg	Gln	Asp	Ala	Asp	Glu	Glu	Ala	Leu

				405					410				415				
Tyr	Tyr	Thr	Gly	Val	Arg	Ala	Gln	Ile	Leu	Ala	Glu	Pro	Glu	Trp	Val		
			420					425					430				
Met	Gln	Pro	Ser	Ile	Asp	Ile	Gln	Leu	Asn	Arg	Arg	Gln	Ser	Thr	Ala		
		435					440					445					
Lys	Lys	Val	Leu	Leu	Ser	Tyr	Tyr	Thr	Gln	Tyr	Ser	Gln	Thr	Ile	Ser		
	450					455					460						
Thr	Lys	Asp	Thr	Arg	Gln	Ala	Arg	Gly	Arg	Ser	Trp	Val	Met	Ile	Glu		
465					470					475					480		
Pro	Ser	Gly	Ala	Val	Gln	Arg	Asp	Gln	Thr	Val	Leu	Glu	Gly	Gly	Pro		
				485				490					495				
Cys	Gln	Leu	Ser	Cys	Asn	Val	Lys	Ala	Ser	Glu	Ser	Pro	Ser	Ile	Phe		
		500					505					510					
Trp	Val	Leu	Pro	Asp	Gly	Ser	Ile	Leu	Lys	Ala	Pro	Met	Asp	Asp	Pro		
	515						520					525					
Asp	Ser	Lys	Phe	Ser	Ile	Leu	Ser	Ser	Gly	Trp	Leu	Arg	Ile	Lys	Ser		
	530					535					540						
Met	Glu	Pro	Ser	Asp	Ser	Gly	Leu	Tyr	Gln	Cys	Ile	Ala	Gln	Val	Arg		
545					550					555					560		
Asp	Glu	Met	Asp	Arg	Met	Val	Tyr	Arg	Val	Leu	Val	Gln	Ser	Pro	Ser		
				565					570						575		
Thr	Gln	Pro	Ala	Glu	Lys	Asp	Thr	Val	Thr	Ile	Gly	Lys	Asn	Pro	Gly		
		580					585						590				
Glu	Ser	Val	Thr	Leu	Pro	Cys	Asn	Ala	Leu	Ala	Ile	Pro	Glu	Ala	His		
	595					600						605					
Leu	Ser	Trp	Ile	Leu	Pro	Asn	Arg	Arg	Ile	Ile	Asn	Asp	Leu	Ala	Asn		
	610					615					620						
Thr	Ser	His	Val	Tyr	Met	Leu	Pro	Asn	Gly	Thr	Leu	Ser	Ile	Pro	Lys		
625					630					635					640		
Val	Gln	Val	Ser	Asp	Ser	Gly	Tyr	Tyr	Arg	Cys	Val	Ala	Val	Asn	Gln		
				645					650					655			
Gln	Gly	Ala	Asp	His	Phe	Thr	Val	Gly	Ile	Thr	Val	Thr	Lys	Lys	Gly		
		660						665					670				
Ser	Gly	Leu	Pro	Ser	Lys	Arg	Gly	Arg	Arg	Pro	Gly	Ala	Lys	Ala	Leu		
	675						680					685					
Ser	Arg	Val	Arg	Glu	Asp	Ile	Val	Glu	Asp	Glu	Gly	Gly	Ser	Gly	Met		
	690					695					700						
Gly	Asp	Glu	Glu	Asn	Thr	Ser	Arg	Arg	Leu	Leu	His	Pro	Lys	Asp	Gln		
705					710					715					720		
Glu	Val	Phe	Leu	Lys	Thr	Lys	Asp	Asp	Ala	Ile	Asn	Gly	Asp	Lys	Lys		
				725					730					735			
Ala	Lys	Lys	Gly	Arg	Arg	Lys	Leu	Lys	Leu	Trp	Lys	His	Ser	Glu	Lys		
		740						745					750				
Glu	Pro	Glu	Thr	Asn	Val	Ala	Glu	Gly	Arg	Arg	Val	Phe	Glu	Ser	Arg		
	755						760					765					
Arg	Arg	Ile	Asn	Met	Ala	Asn	Lys	Gln	Ile	Asn	Pro	Glu	Arg	Trp	Ala		
	770					775						780					
Asp	Ile	Leu	Ala	Lys	Val	Arg	Gly	Lys	Asn	Leu	Pro	Lys	Gly	Thr	Glu		
785					790					795					800		
Val	Pro	Pro	Leu	Ile	Lys	Thr	Thr	Ser	Pro	Pro	Ser	Leu	Ser	Leu	Glu		
				805					810					815			
Val	Thr	Pro	Pro	Phe	Pro	Ala	Val	Ser	Pro	Pro	Ser	Ala	Ser	Pro	Val		
		820						825					830				
Gln	Thr	Val	Thr	Ser	Ala	Glu	Glu	Ser	Ser	Ala	Asp	Val	Pro	Leu	Leu		
	835						840					845					
Gly	Glu	Glu	Glu	His	Val	Leu	Gly	Thr	Ile	Ser	Ser	Ala	Ser	Met	Gly		
	850					855					860						

Leu	Glu	His	Asn	His	Asn	Gly	Val	Ile	Leu	Val	Glu	Pro	Glu	Val	Thr
865					870					875					880
Ser	Thr	Pro	Leu	Glu	Glu	Val	Val	Asp	Asp	Leu	Ser	Glu	Lys	Thr	Glu
				885					890						895
Glu	Ile	Thr	Ser	Thr	Glu	Gly	Asp	Leu	Lys	Gly	Thr	Ala	Ala	Pro	Thr
			900					905					910		
Leu	Ile	Ser	Glu	Pro	Tyr	Glu	Pro	Ser	Pro	Thr	Leu	His	Thr	Leu	Asp
		915					920					925			
Thr	Val	Tyr	Glu	Lys	Pro	Thr	His	Glu	Glu	Thr	Ala	Thr	Glu	Gly	Trp
	930					935					940				
Ser	Ala	Ala	Asp	Val	Gly	Ser	Ser	Pro	Glu	Pro	Thr	Ser	Ser	Glu	Tyr
945					950					955					960
Glu	Pro	Pro	Leu	Asp	Ala	Val	Ser	Leu	Ala	Glu	Ser	Glu	Pro	Met	Gln
				965					970						975
Tyr	Phe	Asp	Pro	Asp	Leu	Glu	Thr	Lys	Ser	Gln	Pro	Asp	Glu	Asp	Lys
			980					985				990			
Met	Lys	Glu	Asp	Thr	Phe	Ala	His	Leu	Thr	Pro	Thr	Pro	Thr	Ile	Trp
		995					1000					1005			
Val	Asn	Asp	Ser	Ser	Thr	Ser	Gln	Leu	Phe	Glu	Asp	Ser	Thr	Ile	Gly
	1010						1015				1020				
Glu	Pro	Gly	Val	Pro	Gly	Gln	Ser	His	Leu	Gln	Gly	Leu	Thr	Asp	Asn
1025					1030					1035					1040
Ile	His	Leu	Val	Lys	Ser	Ser	Leu	Ser	Thr	Gln	Asp	Thr	Leu	Leu	Ile
				1045					1050					1055	
Lys	Lys	Gly	Met	Lys	Glu	Met	Ser	Gln	Thr	Leu	Gln	Gly	Gly	Asn	Met
			1060					1065					1070		
Leu	Glu	Gly	Asp	Pro	Thr	His	Ser	Arg	Ser	Ser	Glu	Ser	Glu	Gly	Gln
		1075					1080					1085			
Glu	Ser	Lys	Ser	Ile	Thr	Leu	Pro	Asp	Ser	Thr	Leu	Gly	Ile	Met	Ser
	1090					1095					1100				
Ser	Met	Ser	Pro	Val	Lys	Lys	Pro	Ala	Glu	Thr	Thr	Val	Gly	Thr	Leu
1105					1110					1115					1120
Leu	Asp	Lys	Asp	Thr	Thr	Thr	Val	Thr	Thr	Thr	Pro	Arg	Gln	Lys	Val
				1125					1130					1135	
Ala	Pro	Ser	Ser	Thr	Met	Ser	Thr	His	Pro	Ser	Arg	Arg	Arg	Pro	Asn
			1140					1145					1150		
Gly	Arg	Arg	Arg	Leu	Arg	Pro	Asn	Lys	Phe	Arg	His	Arg	His	Lys	Gln
	1155					1160					1165				
Thr	Pro	Pro	Thr	Thr	Phe	Ala	Pro	Ser	Glu	Thr	Phe	Ser	Thr	Gln	Pro
	1170					1175					1180				
Thr	Gln	Ala	Pro	Asp	Ile	Lys	Ile	Ser	Ser	Gln	Val	Glu	Ser	Ser	Leu
1185					1190					1195					1200
Val	Pro	Thr	Ala	Trp	Val	Asp	Asn	Thr	Val	Asn	Thr	Pro	Lys	Gln	Leu
				1205					1210					1215	
Glu	Met	Glu	Lys	Asn	Ala	Glu	Pro	Thr	Ser	Lys	Gly	Thr	Pro	Arg	Arg
			1220					1225					1230		
Lys	His	Gly	Lys	Arg	Pro	Asn	Lys	His	Arg	Tyr	Thr	Pro	Ser	Thr	Val
	1235						1240					1245			
Ser	Ser	Arg	Ala	Ser	Gly	Ser	Lys	Pro	Ser	Pro	Ser	Pro	Glu	Asn	Lys
	1250					1255					1260				
His	Arg	Asn	Ile	Val	Thr	Pro	Ser	Ser	Glu	Thr	Ile	Leu	Leu	Pro	Arg
1265					1270					1275					1280
Thr	Val	Ser	Leu	Lys	Thr	Glu	Gly	Pro	Tyr	Asp	Ser	Leu	Asp	Tyr	Met
				1285					1290					1295	
Thr	Thr	Thr	Arg	Lys	Ile	Tyr	Ser	Ser	Tyr	Pro	Lys	Val	Gln	Glu	Thr
			1300					1305					1310		
Leu	Pro	Val	Thr	Tyr	Lys	Pro	Thr	Ser	Asp	Gly	Lys	Glu	Ile	Lys	Asp

	1315		1320		1325
Asp	Val Ala Thr Asn Val	Asp Lys His Lys Ser	Asp Ile Leu Val Thr		
	1330	1335	1340		
Gly	Glu Ser Ile Thr Asn Ala Ile Pro Thr	Ser Arg Ser Leu Val Ser			
1345		1350	1355		1360
Thr	Met Gly Glu Phe Lys Glu Glu Ser Ser	Pro Val Gly Phe Pro Gly			
	1365	1370	1375		
Thr	Pro Thr Trp Asn Pro Ser Arg Thr	Ala Gln Pro Gly Arg Leu Gln			
	1380	1385	1390		
Thr	Asp Ile Pro Val Thr Thr Ser Gly Glu Asn Leu	Thr Asp Pro Pro			
	1395	1400	1405		
Leu	Leu Lys Glu Leu Glu Asp Val Asp Phe Thr	Ser Glu Phe Leu Ser			
	1410	1415	1420		
Ser	Leu Thr Val Ser Thr Pro Phe His Gln Glu Glu	Ala Gly Ser Ser			
1425		1430	1435		1440
Thr	Thr Leu Ser Ser Ile Lys Val Glu Val	Ala Ser Ser Gln Ala Glu			
	1445	1450	1455		
Thr	Thr Thr Leu Asp Gln Asp His Leu Glu Thr	Thr Val Ala Ile Leu			
	1460	1465	1470		
Leu	Ser Glu Thr Arg Pro Gln Asn His Thr Pro	Thr Ala Ala Arg Met			
	1475	1480	1485		
Lys	Glu Pro Ala Ser Ser Ser Pro Ser Thr	Ile Leu Met Ser Leu Gly			
	1490	1495	1500		
Gln	Thr Thr Thr Thr Lys Pro Ala Leu Pro	Ser Pro Arg Ile Ser Gln			
1505		1510	1515		1520
Ala	Ser Arg Asp Ser Lys Glu Asn Val Phe	Leu Asn Tyr Val Gly Asn			
	1525	1530	1535		
Pro	Glu Thr Glu Ala Thr Pro Val Asn Asn	Glu Gly Thr Gln His Met			
	1540	1545	1550		
Ser	Gly Pro Asn Glu Leu Ser Thr Pro Ser	Ser Asp Arg Asp Ala Phe			
	1555	1560	1565		
Asn	Leu Ser Thr Lys Leu Glu Leu Glu Lys	Gln Val Phe Gly Ser Arg			
	1570	1575	1580		
Ser	Leu Pro Arg Gly Pro Asp Ser Gln Arg	Gln Asp Gly Arg Val His			
1585		1590	1595		1600
Ala	Ser His Gln Leu Thr Arg Val Pro Ala	Lys Pro Ile Leu Pro Thr			
	1605	1610	1615		
Ala	Thr Val Arg Leu Pro Glu Met Ser Thr	Gln Ser Ala Ser Arg Tyr			
	1620	1625	1630		
Phe	Val Thr Ser Gln Ser Pro Arg His Trp	Thr Asn Lys Pro Glu Ile			
	1635	1640	1645		
Thr	Thr Tyr Pro Ser Gly Ala Leu Pro Glu	Asn Lys Gln Phe Thr Thr			
	1650	1655	1660		
Pro	Arg Leu Ser Ser Thr Thr Ile Pro Leu	Pro Leu His Met Ser Lys			
1665		1670	1675		1680
Pro	Ser Ile Pro Ser Lys Phe Thr Asp Arg	Arg Thr Asp Gln Phe Asn			
	1685	1690	1695		
Gly	Tyr Ser Lys Val Phe Gly Asn Asn Asn	Ile Pro Glu Ala Arg Asn			
	1700	1705	1710		
Pro	Val Gly Lys Pro Pro Ser Pro Arg Ile	Pro His Tyr Ser Asn Gly			
	1715	1720	1725		
Arg	Leu Pro Phe Phe Thr Asn Lys Thr Leu	Ser Phe Pro Gln Leu Gly			
	1730	1735	1740		
Val	Thr Arg Arg Pro Gln Ile Pro Thr Ser	Pro Ala Pro Val Met Arg			
1745		1750	1755		1760
Glu	Arg Lys Val Ile Pro Gly Ser Tyr Asn	Arg Ile His Ser His Ser			
	1765	1770	1775		

Thr	Phe	His	Leu	Asp	Phe	Gly	Pro	Pro	Ala	Pro	Pro	Leu	Leu	His	Thr	1780	1785	1790
Pro	Gln	Thr	Thr	Gly	Ser	Pro	Ser	Thr	Asn	Leu	Gln	Asn	Ile	Pro	Met	1795	1800	1805
Val	Ser	Ser	Thr	Gln	Ser	Ser	Ile	Ser	Phe	Ile	Thr	Ser	Ser	Val	Gln	1810	1815	1820
Ser	Ser	Gly	Ser	Phe	His	Gln	Ser	Ser	Ser	Lys	Phe	Phe	Ala	Gly	Gly	1825	1830	1835
Pro	Pro	Ala	Ser	Lys	Phe	Trp	Ser	Leu	Gly	Glu	Lys	Pro	Gln	Ile	Leu	1845	1850	1855
Thr	Lys	Ser	Pro	Gln	Thr	Val	Ser	Val	Thr	Ala	Glu	Thr	Asp	Thr	Val	1860	1865	1870
Phe	Pro	Cys	Glu	Ala	Thr	Gly	Lys	Pro	Lys	Pro	Phe	Val	Thr	Trp	Thr	1875	1880	1885
Lys	Val	Ser	Thr	Gly	Ala	Leu	Met	Thr	Pro	Asn	Thr	Arg	Ile	Gln	Arg	1890	1895	1900
Phe	Glu	Val	Leu	Lys	Asn	Gly	Thr	Leu	Val	Ile	Arg	Lys	Val	Gln	Val	1905	1910	1915
Gln	Asp	Arg	Gly	Gln	Tyr	Met	Cys	Thr	Ala	Ser	Asn	Leu	His	Gly	Leu	1925	1930	1935
Asp	Arg	Met	Val	Val	Leu	Leu	Ser	Val	Thr	Val	Gln	Gln	Pro	Gln	Ile	1940	1945	1950
Leu	Ala	Ser	His	Tyr	Gln	Asp	Val	Thr	Val	Tyr	Leu	Gly	Asp	Thr	Ile	1955	1960	1965
Ala	Met	Glu	Cys	Leu	Ala	Lys	Gly	Thr	Pro	Ala	Pro	Gln	Ile	Ser	Trp	1970	1975	1980
Ile	Phe	Pro	Asp	Arg	Arg	Val	Trp	Gln	Thr	Val	Ser	Pro	Val	Glu	Ser	1985	1990	1995
Arg	Ile	Thr	Leu	His	Glu	Asn	Arg	Thr	Leu	Ser	Ile	Lys	Glu	Ala	Ser	2005	2010	2015
Phe	Ser	Asp	Arg	Gly	Val	Tyr	Lys	Cys	Val	Ala	Ser	Asn	Ala	Ala	Gly	2020	2025	2030
Ala	Asp	Ser	Leu	Ala	Ile	Arg	Leu	His	Val	Ala	Ala	Leu	Pro	Pro	Val	2035	2040	2045
Ile	His	Gln	Glu	Lys	Leu	Glu	Asn	Ile	Ser	Leu	Pro	Pro	Gly	Leu	Ser	2050	2055	2060
Ile	His	Ile	His	Cys	Thr	Ala	Lys	Ala	Ala	Pro	Leu	Pro	Ser	Val	Arg	2065	2070	2075
Trp	Val	Leu	Gly	Asp	Gly	Thr	Gln	Ile	Arg	Pro	Ser	Gln	Phe	Leu	His	2085	2090	2095
Gly	Asn	Leu	Phe	Val	Phe	Pro	Asn	Gly	Thr	Leu	Tyr	Ile	Arg	Asn	Leu	2100	2105	2110
Ala	Pro	Lys	Asp	Ser	Gly	Arg	Tyr	Glu	Cys	Val	Ala	Ala	Asn	Leu	Val	2115	2120	2125
Gly	Ser	Ala	Arg	Arg	Thr	Val	Gln	Leu	Asn	Val	Gln	Arg	Ala	Ala	Ala	2130	2135	2140
Asn	Ala	Arg	Ile	Thr	Gly	Thr	Ser	Pro	Arg	Arg	Thr	Asp	Val	Arg	Tyr	2145	2150	2155
Gly	Gly	Thr	Leu	Lys	Leu	Asp	Cys	Ser	Ala	Ser	Gly	Asp	Pro	Trp	Pro	2165	2170	2175
Arg	Ile	Leu	Trp	Arg	Leu	Pro	Ser	Lys	Arg	Met	Ile	Asp	Ala	Leu	Phe	2180	2185	2190
Ser	Phe	Asp	Ser	Arg	Ile	Lys	Val	Phe	Ala	Asn	Gly	Thr	Leu	Val	Val	2195	2200	2205
Lys	Ser	Val	Thr	Asp	Lys	Asp	Ala	Gly	Asp	Tyr	Leu	Cys	Val	Ala	Arg	2210	2215	2220
Asn	Lys	Val	Gly	Asp	Asp	Tyr	Val	Val	Leu	Lys	Val	Asp	Val	Val	Met			

2225		2230		2235		2240
Lys Pro Ala Lys	Ile Glu His Lys Glu Glu Asn Asp His Lys Val Phe					
	2245		2250		2255	
Tyr Gly Gly Asp	Leu Lys Val Asp Cys Val Ala Thr Gly Leu Pro Asn					
	2260		2265		2270	
Pro Glu Ile Ser Trp Ser Leu Pro Asp Gly Ser Leu Val Asn Ser Phe						
	2275		2280		2285	
Met Gln Ser Asp Asp Ser Gly Gly Arg Thr Lys Arg Tyr Val Val Phe						
	2290		2295		2300	
Asn Asn Gly Thr Leu Tyr Phe Asn Glu Val Gly Met Arg Glu Glu Gly						
2305	2310		2315		2320	
Asp Tyr Thr Cys Phe Ala Glu Asn Gln Val Gly Lys Asp Glu Met Arg						
	2325		2330		2335	
Val Arg Val Lys Val Val Thr Ala Pro Ala Thr Ile Arg Asn Lys Thr						
	2340		2345		2350	
Tyr Leu Ala Val Gln Val Pro Tyr Gly Asp Val Val Thr Val Ala Cys						
	2355		2360		2365	
Glu Ala Lys Gly Glu Pro Met Pro Lys Val Thr Trp Leu Ser Pro Thr						
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Asn Lys Val Ile Pro Thr Ser Ser Glu Lys Tyr Gln Ile Tyr Gln Asp						
2385	2390		2395		2400	
Gly Thr Leu Leu Ile Gln Lys Ala Gln Arg Ser Asp Ser Gly Asn Tyr						
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Thr Cys Leu Val Arg Asn Ser Ala Gly Glu Asp Arg Lys Thr Val Trp						
	2420		2425		2430	
Ile His Val Asn Val Gln Pro Pro Lys Ile Asn Gly Asn Pro Asn Pro						
	2435		2440		2445	
Ile Thr Thr Val Arg Glu Ile Ala Ala Gly Gly Ser Arg Lys Leu Ile						
	2450		2455		2460	
Asp Cys Lys Ala Glu Gly Ile Pro Thr Pro Arg Val Leu Trp Ala Phe						
2465	2470		2475		2480	
Pro Glu Gly Val Val Leu Pro Ala Pro Tyr Tyr Gly Asn Arg Ile Thr						
	2485		2490		2495	
Val His Gly Asn Gly Ser Leu Asp Ile Arg Ser Leu Arg Lys Ser Asp						
	2500		2505		2510	
Ser Val Gln Leu Val Cys Met Ala Arg Asn Glu Gly Gly Glu Ala Arg						
	2515		2520		2525	
Leu Ile Val Gln Leu Thr Val Leu Glu Pro Met Glu Lys Pro Ile Phe						
	2530		2535		2540	
His Asp Pro Ile Ser Glu Lys Ile Thr Ala Met Ala Gly His Thr Ile						
2545	2550		2555		2560	
Ser Leu Asn Cys Ser Ala Ala Gly Thr Pro Thr Pro Ser Leu Val Trp						
	2565		2570		2575	
Val Leu Pro Asn Gly Thr Asp Leu Gln Ser Gly Gln Gln Leu Gln Arg						
	2580		2585		2590	
Phe Tyr His Lys Ala Asp Gly Met Leu His Ile Ser Gly Leu Ser Ser						
	2595		2600		2605	
Val Asp Ala Gly Ala Tyr Arg Cys Val Ala Arg Asn Ala Ala Gly His						
	2610		2615		2620	
Thr Glu Arg Leu Val Ser Leu Lys Val Gly Leu Lys Pro Glu Ala Asn						
2625	2630		2635		2640	
Lys Gln Tyr His Asn Leu Val Ser Ile Ile Asn Gly Glu Thr Leu Lys						
	2645		2650		2655	
Leu Pro Cys Thr Pro Pro Gly Ala Gly Gln Gly Arg Phe Ser Trp Thr						
	2660		2665		2670	
Leu Pro Asn Gly Met His Leu Glu Gly Pro Gln Thr Leu Gly Arg Val						
	2675		2680		2685	

Ser Leu Leu Asp Asn Gly Thr Leu Thr Val Arg Glu Ala Ser Val Phe
 2690 2695 2700
 Asp Arg Gly Thr Tyr Val Cys Arg Met Glu Thr Glu Tyr Gly Pro Ser
 2705 2710 2715 2720
 Val Thr Ser Ile Pro Val Ile Val Ile Ala Tyr Pro Pro Arg Ile Thr
 2725 2730 2735
 Ser Glu Pro Thr Pro Val Ile Tyr Thr Arg Pro Gly Asn Thr Val Lys
 2740 2745 2750
 Leu Asn Cys Met Ala Met Gly Ile Pro Lys Ala Asp Ile Thr Trp Glu
 2755 2760 2765
 Leu Pro Asp Lys Ser His Leu Lys Ala Gly Val Gln Ala Arg Leu Tyr
 2770 2775 2780
 Gly Asn Arg Phe Leu His Pro Gln Gly Ser Leu Thr Ile Gln His Ala
 2785 2790 2795 2800
 Thr Gln Arg Asp Ala Gly Phe Tyr Lys Cys Met Ala Lys Asn Ile Leu
 2805 2810 2815
 Gly Ser Asp Ser Lys Thr Thr Tyr Ile His Val Phe
 2820 2825

<210> 125
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 <212> PRT
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<400> 125

Met Phe Ser Phe Val Asp Leu Arg Leu Leu Leu Leu Leu Ala Ala Thr
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 Ala Leu Leu Thr His Gly Gln Glu Glu Gly Gln Val Glu Gly Gln Asp
 20 25 30
 Glu Asp Ile Pro Pro Ile Thr Cys Val Gln Asn Gly Leu Arg Tyr His
 35 40 45
 Asp Arg Asp Val Trp Lys Pro Glu Pro Cys Arg Ile Cys Val Cys Asp
 50 55 60
 Asn Gly Lys Val Leu Cys Asp Asp Val Ile Cys Asp Glu Thr Lys Asn
 65 70 75 80
 Cys Pro Gly Ala Glu Val Pro Glu Gly Glu Cys Cys Pro Val Cys Pro
 85 90 95
 Asp Gly Ser Glu Ser Pro Thr Asp Gln Glu Thr Thr Gly Val Glu Gly
 100 105 110
 Pro Lys Gly Asp Thr Gly Pro Arg Gly Pro Arg Gly Pro Ala Gly Pro
 115 120 125
 Pro Gly Arg Asp Gly Ile Pro Gly Gln Pro Gly Leu Pro Gly Pro Pro
 130 135 140
 Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Leu Gly Gly Asn Phe Ala
 145 150 155 160
 Pro Gln Leu Ser Tyr Gly Tyr Asp Glu Lys Ser Thr Gly Gly Ile Ser
 165 170 175
 Val Pro Gly Pro Met Gly Pro Ser Gly Pro Arg Gly Leu Pro Gly Pro
 180 185 190
 Pro Gly Ala Pro Gly Pro Gln Gly Phe Gln Gly Pro Pro Gly Glu Pro
 195 200 205
 Gly Glu Pro Gly Ala Ser Gly Pro Met Gly Pro Arg Gly Pro Pro Gly
 210 215 220
 Pro Pro Gly Lys Asn Gly Asp Asp Gly Glu Ala Gly Lys Pro Gly Arg
 225 230 235 240
 Pro Gly Glu Arg Gly Pro Pro Gly Pro Gln Gly Ala Arg Gly Leu Pro

				245					250					255			
Gly	Thr	Ala	Gly	Leu	Pro	Gly	Met	Lys	Gly	His	Arg	Gly	Phe	Ser	Gly		
			260					265					270				
Leu	Asp	Gly	Ala	Lys	Gly	Asp	Ala	Gly	Pro	Ala	Gly	Pro	Lys	Gly	Glu		
		275					280					285					
Pro	Gly	Ser	Pro	Gly	Glu	Asn	Gly	Ala	Pro	Gly	Gln	Met	Gly	Pro	Arg		
	290					295					300						
Gly	Leu	Pro	Gly	Glu	Arg	Gly	Arg	Pro	Gly	Ala	Pro	Gly	Pro	Ala	Gly		
305					310					315					320		
Ala	Arg	Gly	Asn	Asp	Gly	Ala	Thr	Gly	Ala	Ala	Gly	Pro	Pro	Gly	Pro		
			325					330						335			
Thr	Gly	Pro	Ala	Gly	Pro	Pro	Gly	Phe	Pro	Gly	Ala	Val	Gly	Ala	Lys		
			340					345					350				
Gly	Glu	Ala	Gly	Pro	Gln	Gly	Pro	Arg	Gly	Ser	Glu	Gly	Pro	Gln	Gly		
		355				360					365						
Val	Arg	Gly	Glu	Pro	Gly	Pro	Pro	Gly	Pro	Ala	Gly	Ala	Ala	Gly	Pro		
	370				375					380							
Ala	Gly	Asn	Pro	Gly	Ala	Asp	Gly	Gln	Pro	Gly	Ala	Lys	Gly	Ala	Asn		
385				390				395						400			
Gly	Ala	Pro	Gly	Ile	Ala	Gly	Ala	Pro	Gly	Phe	Pro	Gly	Ala	Arg	Gly		
			405					410					415				
Pro	Ser	Gly	Pro	Gln	Gly	Pro	Gly	Gly	Pro	Pro	Gly	Pro	Lys	Gly	Asn		
		420					425					430					
Ser	Gly	Glu	Pro	Gly	Ala	Pro	Gly	Ser	Lys	Gly	Asp	Thr	Gly	Ala	Lys		
	435					440					445						
Gly	Glu	Pro	Gly	Pro	Val	Gly	Val	Gln	Gly	Pro	Pro	Gly	Pro	Ala	Gly		
	450				455			460									
Glu	Glu	Gly	Lys	Arg	Gly	Ala	Arg	Gly	Glu	Pro	Gly	Pro	Thr	Gly	Leu		
465				470				475						480			
Pro	Gly	Pro	Pro	Gly	Glu	Arg	Gly	Gly	Pro	Gly	Ser	Arg	Gly	Phe	Pro		
			485					490					495				
Gly	Ala	Asp	Gly	Val	Ala	Gly	Pro	Lys	Gly	Pro	Ala	Gly	Glu	Arg	Gly		
		500						505				510					
Ser	Pro	Gly	Pro	Ala	Gly	Pro	Lys	Gly	Ser	Pro	Gly	Glu	Ala	Gly	Arg		
	515					520					525						
Pro	Gly	Glu	Ala	Gly	Leu	Pro	Gly	Ala	Lys	Gly	Leu	Thr	Gly	Ser	Pro		
	530				535			540									
Gly	Ser	Pro	Gly	Pro	Asp	Gly	Lys	Thr	Gly	Pro	Pro	Gly	Pro	Ala	Gly		
545				550				555						560			
Gln	Asp	Gly	Arg	Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Ala	Arg	Gly	Gln		
			565					570				575					
Ala	Gly	Val	Met	Gly	Phe	Pro	Gly	Pro	Lys	Gly	Ala	Ala	Gly	Glu	Pro		
		580						585				590					
Gly	Lys	Ala	Gly	Glu	Arg	Gly	Val	Pro	Gly	Pro	Pro	Gly	Ala	Val	Gly		
	595					600					605						
Pro	Ala	Gly	Lys	Asp	Gly	Glu	Ala	Gly	Ala	Gln	Gly	Pro	Pro	Gly	Pro		
	610				615			620									
Ala	Gly	Pro	Ala	Gly	Glu	Arg	Gly	Glu	Gln	Gly	Pro	Ala	Gly	Ser	Pro		
625				630				635						640			
Gly	Phe	Gln	Gly	Leu	Pro	Gly	Pro	Ala	Gly	Pro	Pro	Gly	Glu	Ala	Gly		
			645					650				655					
Lys	Pro	Gly	Glu	Gln	Gly	Val	Pro	Gly	Asp	Leu	Gly	Ala	Pro	Gly	Pro		
		660					665					670					
Ser	Gly	Ala	Arg	Gly	Glu	Arg	Gly	Phe	Pro	Gly	Glu	Arg	Gly	Val	Gln		
	675					680					685						
Gly	Pro	Pro	Gly	Pro	Ala	Gly	Pro	Arg	Gly	Ala	Asn	Gly	Ala	Pro	Gly		
	690				695			700									

Asn	Asp	Gly	Ala	Lys	Gly	Asp	Ala	Gly	Ala	Pro	Gly	Ala	Pro	Gly	Ser	705	710	715	720
Gln	Gly	Ala	Pro	Gly	Leu	Gln	Gly	Met	Pro	Gly	Glu	Arg	Gly	Ala	Ala	725	730	735	
Gly	Leu	Pro	Gly	Pro	Lys	Gly	Asp	Arg	Gly	Asp	Ala	Gly	Pro	Lys	Gly	740	745	750	
Ala	Asp	Gly	Ser	Pro	Gly	Lys	Asp	Gly	Val	Arg	Gly	Leu	Thr	Gly	Pro	755	760	765	
Ile	Gly	Pro	Pro	Gly	Pro	Ala	Gly	Ala	Pro	Gly	Asp	Lys	Gly	Glu	Ser	770	775	780	
Gly	Pro	Ser	Gly	Pro	Ala	Gly	Pro	Thr	Gly	Ala	Arg	Gly	Ala	Pro	Gly	785	790	795	800
Asp	Arg	Gly	Glu	Pro	Gly	Pro	Pro	Gly	Pro	Ala	Gly	Phe	Ala	Gly	Pro	805	810	815	
Pro	Gly	Ala	Asp	Gly	Gln	Pro	Gly	Ala	Lys	Gly	Glu	Pro	Gly	Asp	Ala	820	825	830	
Gly	Ala	Lys	Gly	Asp	Ala	Gly	Pro	Pro	Gly	Pro	Ala	Gly	Pro	Ala	Gly	835	840	845	
Pro	Pro	Gly	Pro	Ile	Gly	Asn	Val	Gly	Ala	Pro	Gly	Ala	Lys	Gly	Ala	850	855	860	
Arg	Gly	Ser	Ala	Gly	Pro	Pro	Gly	Ala	Thr	Gly	Phe	Pro	Gly	Ala	Ala	865	870	875	880
Gly	Arg	Val	Gly	Pro	Pro	Gly	Pro	Ser	Gly	Asn	Ala	Gly	Pro	Pro	Gly	885	890	895	
Pro	Pro	Gly	Pro	Ala	Gly	Lys	Glu	Gly	Lys	Gly	Pro	Arg	Gly	Glu		900	905	910	
Thr	Gly	Pro	Ala	Gly	Arg	Pro	Gly	Glu	Val	Gly	Pro	Pro	Gly	Pro	Pro	915	920	925	
Gly	Pro	Ala	Gly	Glu	Lys	Gly	Ser	Pro	Gly	Ala	Asp	Gly	Pro	Ala	Gly	930	935	940	
Ala	Pro	Gly	Thr	Pro	Gly	Pro	Gln	Gly	Ile	Ala	Gly	Gln	Arg	Gly	Val	945	950	955	960
Val	Gly	Leu	Pro	Gly	Gln	Arg	Gly	Glu	Arg	Gly	Phe	Pro	Gly	Leu	Pro	965	970	975	
Gly	Pro	Ser	Gly	Glu	Pro	Gly	Lys	Gln	Gly	Pro	Ser	Gly	Ala	Ser	Gly	980	985	990	
Glu	Arg	Gly	Pro	Pro	Gly	Pro	Met	Gly	Pro	Pro	Gly	Leu	Ala	Gly	Pro	995	1000	1005	
Pro	Gly	Glu	Ser	Gly	Arg	Glu	Gly	Ala	Pro	Ala	Ala	Glu	Gly	Ser	Pro	1010	1015	1020	
Gly	Arg	Asp	Gly	Ser	Pro	Gly	Ala	Lys	Gly	Asp	Arg	Gly	Glu	Thr	Gly	1025	1030	1035	1040
Pro	Ala	Gly	Pro	Pro	Gly	Ala	Pro	Gly	Ala	Pro	Gly	Ala	Pro	Gly	Pro	1045	1050	1055	
Val	Gly	Pro	Ala	Gly	Lys	Ser	Gly	Asp	Arg	Gly	Glu	Thr	Gly	Pro	Ala	1060	1065	1070	
Gly	Pro	Ala	Gly	Pro	Val	Gly	Pro	Val	Gly	Ala	Arg	Gly	Pro	Ala	Gly	1075	1080	1085	
Pro	Gln	Gly	Pro	Arg	Gly	Asp	Lys	Gly	Glu	Thr	Gly	Glu	Gln	Gly	Asp	1090	1095	1100	
Arg	Gly	Ile	Lys	Gly	His	Arg	Gly	Phe	Ser	Gly	Leu	Gln	Gly	Pro	Pro	1105	1110	1115	1120
Gly	Pro	Pro	Gly	Ser	Pro	Gly	Glu	Gln	Gly	Pro	Ser	Gly	Ala	Ser	Gly	1125	1130	1135	
Pro	Ala	Gly	Pro	Arg	Gly	Pro	Pro	Gly	Ser	Ala	Gly	Ala	Pro	Gly	Lys	1140	1145	1150	
Asp	Gly	Leu	Asn	Gly	Leu	Pro	Gly	Pro	Ile	Gly	Pro	Pro	Gly	Pro	Arg				

1155				1160				1165							
Gly	Arg	Thr	Gly	Asp	Ala	Gly	Pro	Val	Gly	Pro	Pro	Gly	Pro	Pro	Gly
1170				1175				1180							
Pro	Pro	Gly	Pro	Pro	Gly	Pro	Pro	Ser	Ala	Gly	Phe	Asp	Phe	Ser	Phe
1185				1190				1195				1200			
Leu	Pro	Gln	Pro	Pro	Gln	Glu	Lys	Ala	His	Asp	Gly	Gly	Arg	Tyr	Tyr
1205				1210				1215							
Arg	Ala	Asp	Asp	Ala	Asn	Val	Val	Arg	Asp	Arg	Asp	Leu	Glu	Val	Asp
1220				1225				1230							
Thr	Thr	Leu	Lys	Ser	Leu	Ser	Gln	Gln	Ile	Glu	Asn	Ile	Arg	Ser	Pro
1235				1240				1245							
Glu	Gly	Ser	Arg	Lys	Asn	Pro	Ala	Arg	Thr	Cys	Arg	Asp	Leu	Lys	Met
1250				1255				1260							
Cys	His	Ser	Asp	Trp	Lys	Ser	Gly	Glu	Tyr	Trp	Ile	Asp	Pro	Asn	Gln
1265				1270				1275				1280			
Gly	Cys	Asn	Leu	Asp	Ala	Ile	Lys	Val	Phe	Cys	Asn	Met	Glu	Thr	Gly
1285				1290				1295							
Glu	Thr	Cys	Val	Tyr	Pro	Thr	Gln	Pro	Ser	Val	Ala	Gln	Lys	Asn	Trp
1300				1305				1310							
Tyr	Ile	Ser	Lys	Asn	Pro	Lys	Asp	Lys	Arg	His	Val	Trp	Phe	Gly	Glu
1315				1320				1325							
Ser	Met	Thr	Asp	Gly	Phe	Gln	Phe	Glu	Tyr	Gly	Gly	Gln	Gly	Ser	Asp
1330				1335				1340							
Pro	Ala	Asp	Val	Ala	Ile	Gln	Leu	Thr	Phe	Leu	Arg	Leu	Met	Ser	Thr
1345				1350				1355				1360			
Glu	Ala	Ser	Gln	Asn	Ile	Thr	Tyr	His	Cys	Lys	Asn	Ser	Val	Ala	Tyr
1365				1370				1375							
Met	Asp	Gln	Gln	Thr	Gly	Asn	Leu	Lys	Lys	Ala	Leu	Leu	Leu	Lys	Gly
1380				1385				1390							
Ser	Asn	Glu	Ile	Glu	Ile	Arg	Ala	Glu	Gly	Asn	Ser	Arg	Phe	Thr	Tyr
1395				1400				1405							
Ser	Val	Thr	Val	Asp	Gly	Cys	Thr	Ser	His	Thr	Gly	Ala	Trp	Gly	Lys
1410				1415				1420							
Thr	Val	Ile	Glu	Tyr	Lys	Thr	Thr	Lys	Ser	Ser	Arg	Leu	Pro	Ile	Ile
1425				1430				1435				1440			
Asp	Val	Ala	Pro	Leu	Asp	Val	Gly	Ala	Pro	Asp	Gln	Glu	Phe	Gly	Phe
1445				1450				1455							
Asp	Val	Gly	Pro	Val	Cys	Phe	Leu								
1460															

<210> 126
 <211> 308
 <212> PRT
 <213> Homo sapiens

<400> 126

Met	Pro	Gly	Gln	Glu	Leu	Arg	Thr	Val	Asn	Gly	Ser	Gln	Met	Leu	Leu
1				5					10				15		
Val	Leu	Leu	Val	Leu	Ser	Trp	Leu	Pro	His	Gly	Gly	Ala	Leu	Ser	Leu
			20					25					30		
Ala	Glu	Ala	Ser	Arg	Ala	Ser	Phe	Pro	Gly	Pro	Ser	Glu	Leu	His	Ser
			35				40					45			
Glu	Asp	Ser	Arg	Phe	Arg	Glu	Leu	Arg	Lys	Arg	Tyr	Glu	Asp	Leu	Leu
	50					55				60					
Thr	Arg	Leu	Arg	Ala	Asn	Gln	Ser	Trp	Glu	Asp	Ser	Asn	Thr	Asp	Leu
65					70				75					80	

Val	Pro	Ala	Pro	Ala	Val	Arg	Ile	Leu	Thr	Pro	Glu	Val	Arg	Leu	Gly
			85						90					95	
Ser	Gly	Gly	His	Leu	His	Leu	Arg	Ile	Ser	Arg	Ala	Ala	Leu	Pro	Glu
			100					105					110		
Gly	Leu	Pro	Glu	Ala	Ser	Arg	Leu	His	Arg	Ala	Leu	Phe	Arg	Leu	Ser
		115					120					125			
Pro	Thr	Ala	Ser	Arg	Ser	Trp	Asp	Val	Thr	Arg	Pro	Leu	Arg	Arg	Gln
	130					135					140				
Leu	Ser	Leu	Ala	Arg	Pro	Gln	Ala	Pro	Ala	Leu	His	Leu	Arg	Leu	Ser
145					150					155					160
Pro	Pro	Pro	Ser	Gln	Ser	Asp	Gln	Leu	Leu	Ala	Glu	Ser	Ser	Ser	Ala
			165						170					175	
Arg	Pro	Gln	Leu	Glu	Leu	His	Leu	Arg	Pro	Gln	Ala	Ala	Arg	Gly	Arg
			180					185					190		
Arg	Arg	Ala	Arg	Ala	Arg	Asn	Gly	Asp	Asp	Cys	Pro	Leu	Gly	Pro	Gly
		195					200					205			
Arg	Cys	Cys	Arg	Leu	His	Thr	Val	Arg	Ala	Ser	Leu	Glu	Asp	Leu	Gly
	210					215					220				
Trp	Ala	Asp	Trp	Val	Leu	Ser	Pro	Arg	Glu	Val	Gln	Val	Thr	Met	Cys
225					230					235					240
Ile	Gly	Ala	Cys	Pro	Ser	Gln	Phe	Arg	Ala	Ala	Asn	Met	His	Ala	Gln
			245						250					255	
Ile	Lys	Thr	Ser	Leu	His	Arg	Leu	Lys	Pro	Asp	Thr	Glu	Pro	Ala	Pro
			260					265					270		
Cys	Cys	Val	Pro	Ala	Ser	Tyr	Asn	Pro	Met	Val	Leu	Ile	Gln	Lys	Thr
		275					280					285			
Asp	Thr	Gly	Val	Ser	Leu	Gln	Thr	Tyr	Asp	Asp	Leu	Leu	Ala	Lys	Asp
	290					295					300				
Cys	His	Cys	Ile												
305															

<210> 127
 <211> 359
 <212> PRT
 <213> Homo sapiens

<400> 127

Met	Pro	Ala	His	Leu	Leu	Gln	Asp	Asp	Ile	Ser	Ser	Ser	Tyr	Thr	Thr
1			5						10					15	
Thr	Thr	Thr	Ile	Thr	Ala	Pro	Pro	Ser	Arg	Val	Leu	Gln	Asn	Gly	Gly
			20					25					30		
Asp	Lys	Leu	Glu	Thr	Met	Pro	Leu	Tyr	Leu	Glu	Asp	Asp	Ile	Arg	Pro
	35						40					45			
Asp	Ile	Lys	Asp	Asp	Ile	Tyr	Asp	Pro	Thr	Tyr	Lys	Asp	Lys	Glu	Gly
	50					55					60				
Pro	Ser	Pro	Lys	Val	Glu	Tyr	Val	Trp	Arg	Asn	Ile	Ile	Leu	Met	Ser
65					70					75					80
Leu	Leu	His	Leu	Gly	Ala	Leu	Tyr	Gly	Ile	Thr	Leu	Ile	Pro	Thr	Cys
			85						90					95	
Lys	Phe	Tyr	Thr	Trp	Leu	Trp	Gly	Val	Phe	Tyr	Tyr	Phe	Val	Ser	Ala
			100					105					110		
Leu	Gly	Ile	Thr	Ala	Gly	Ala	His	Arg	Leu	Trp	Ser	His	Arg	Ser	Tyr
		115					120					125			
Lys	Ala	Arg	Leu	Pro	Leu	Arg	Leu	Phe	Leu	Ile	Ile	Ala	Asn	Thr	Met
	130					135					140				
Ala	Phe	Gln	Asn	Asp	Val	Tyr	Glu	Trp	Ala	Arg	Asp	His	Arg	Ala	His

145					150					155				160
His	Lys	Phe	Ser	Glu	Thr	His	Ala	Asp	Pro	His	Asn	Ser	Arg	Arg Gly
				165					170					175
Phe	Phe	Phe	Ser	His	Val	Gly	Trp	Leu	Val	Arg	Lys	His	Pro	Ala
			180					185					190	
Val	Lys	Glu	Lys	Gly	Ser	Thr	Leu	Asp	Leu	Ser	Asp	Leu	Glu	Ala Glu
		195					200					205		
Lys	Leu	Val	Met	Phe	Gln	Arg	Arg	Tyr	Tyr	Lys	Pro	Gly	Leu	Leu Leu
	210					215				220				
Met	Cys	Phe	Ile	Leu	Pro	Thr	Leu	Val	Pro	Trp	Tyr	Phe	Trp	Gly Glu
225					230					235				240
Thr	Phe	Gln	Asn	Ser	Val	Phe	Val	Ala	Thr	Phe	Leu	Arg	Tyr	Ala Val
			245						250					255
Val	Leu	Asn	Ala	Thr	Trp	Leu	Val	Asn	Ser	Ala	Ala	His	Leu	Phe Gly
		260						265					270	
Tyr	Arg	Pro	Tyr	Asp	Lys	Asn	Ile	Ser	Pro	Arg	Glu	Asn	Ile	Leu Val
		275					280					285		
Ser	Leu	Gly	Ala	Val	Gly	Glu	Gly	Phe	His	Asn	Tyr	His	His	Ser Phe
	290				295					300				
Pro	Tyr	Asp	Tyr	Ser	Ala	Ser	Glu	Tyr	Arg	Trp	His	Ile	Asn	Phe Thr
305					310					315				320
Thr	Phe	Phe	Ile	Asp	Cys	Met	Ala	Ala	Leu	Gly	Leu	Ala	Tyr	Asp Arg
			325						330					335
Lys	Lys	Val	Ser	Lys	Ala	Ala	Ile	Leu	Ala	Arg	Ile	Lys	Arg	Thr Gly
		340						345					350	
Asp	Gly	Asn	Tyr	Lys	Ser	Gly								
		355												

<210> 128
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 128														
Met	Cys	Cys	Thr	Lys	Ser	Leu	Leu	Leu	Ala	Ala	Leu	Met	Ser	Val Leu
1				5					10					15
Leu	Leu	His	Leu	Cys	Gly	Glu	Ser	Glu	Ala	Ala	Ser	Asn	Phe	Asp Cys
			20					25					30	
Cys	Leu	Gly	Tyr	Thr	Asp	Arg	Ile	Leu	His	Pro	Lys	Phe	Ile	Val Gly
		35					40					45		
Phe	Thr	Arg	Gln	Leu	Ala	Asn	Glu	Gly	Cys	Asp	Ile	Asn	Ala	Ile Ile
	50					55					60			
Phe	His	Thr	Lys	Lys	Lys	Leu	Ser	Val	Cys	Ala	Asn	Pro	Lys	Gln Thr
65					70					75				80
Trp	Val	Lys	Tyr	Ile	Val	Arg	Leu	Leu	Ser	Lys	Lys	Val	Lys	Asn Met
				85					90					95

<210> 129
 <211> 518
 <212> PRT
 <213> Homo sapiens

<400> 129														
Met	Gly	Ala	Leu	Ala	Arg	Ala	Leu	Leu	Leu	Pro	Leu	Leu	Ala	Gln Trp
1				5						10				15

Leu	Leu	Arg	Ala	Ala	Pro	Glu	Leu	Ala	Pro	Ala	Pro	Phe	Thr	Leu	Pro
			20					25					30		
Leu	Arg	Val	Ala	Ala	Ala	Thr	Asn	Arg	Val	Val	Ala	Pro	Thr	Pro	Gly
		35					40					45			
Pro	Gly	Thr	Pro	Ala	Glu	Arg	His	Ala	Asp	Gly	Leu	Ala	Leu	Ala	Leu
	50					55					60				
Glu	Pro	Ala	Leu	Ala	Ser	Pro	Ala	Gly	Ala	Ala	Asn	Phe	Leu	Ala	Met
65					70					75					80
Val	Asp	Asn	Leu	Gln	Gly	Asp	Ser	Gly	Arg	Gly	Tyr	Tyr	Leu	Glu	Met
				85					90					95	
Leu	Ile	Gly	Thr	Pro	Pro	Gln	Lys	Leu	Gln	Ile	Leu	Val	Asp	Thr	Gly
			100					105					110		
Ser	Ser	Asn	Phe	Ala	Val	Ala	Gly	Thr	Pro	His	Ser	Tyr	Ile	Asp	Thr
		115					120					125			
Tyr	Phe	Asp	Thr	Glu	Arg	Ser	Ser	Thr	Tyr	Arg	Ser	Lys	Gly	Phe	Asp
	130					135					140				
Val	Thr	Val	Lys	Tyr	Thr	Gln	Gly	Ser	Trp	Thr	Gly	Phe	Val	Gly	Glu
145					150					155					160
Asp	Leu	Val	Thr	Ile	Pro	Lys	Gly	Phe	Asn	Thr	Ser	Phe	Leu	Val	Asn
				165					170					175	
Ile	Ala	Thr	Ile	Phe	Glu	Ser	Glu	Asn	Phe	Phe	Leu	Pro	Gly	Ile	Lys
			180					185					190		
Trp	Asn	Gly	Ile	Leu	Gly	Leu	Ala	Tyr	Ala	Thr	Leu	Ala	Lys	Pro	Ser
	195					200						205			
Ser	Ser	Leu	Glu	Thr	Phe	Phe	Asp	Ser	Leu	Val	Thr	Gln	Ala	Asn	Ile
	210					215					220				
Pro	Asn	Val	Phe	Ser	Met	Gln	Met	Cys	Gly	Ala	Gly	Leu	Pro	Val	Ala
225					230					235					240
Gly	Ser	Gly	Thr	Asn	Gly	Gly	Ser	Leu	Val	Leu	Gly	Gly	Ile	Glu	Pro
				245					250					255	
Ser	Leu	Tyr	Lys	Gly	Asp	Ile	Trp	Tyr	Thr	Pro	Ile	Lys	Glu	Glu	Trp
			260					265					270		
Tyr	Tyr	Gln	Ile	Glu	Ile	Leu	Lys	Leu	Glu	Ile	Gly	Gly	Gln	Ser	Leu
		275					280					285			
Asn	Leu	Asp	Cys	Arg	Glu	Tyr	Asn	Ala	Asp	Lys	Ala	Ile	Val	Asp	Ser
	290					295					300				
Gly	Thr	Thr	Leu	Leu	Arg	Leu	Pro	Gln	Lys	Val	Phe	Asp	Ala	Val	Val
305					310					315					320
Glu	Ala	Val	Ala	Arg	Ala	Ser	Leu	Ile	Pro	Glu	Phe	Ser	Asp	Gly	Phe
				325					330					335	
Trp	Thr	Gly	Ser	Gln	Leu	Ala	Cys	Trp	Thr	Asn	Ser	Glu	Thr	Pro	Trp
			340					345					350		
Ser	Tyr	Phe	Pro	Lys	Ile	Ser	Ile	Tyr	Leu	Arg	Asp	Glu	Asn	Ser	Ser
		355					360					365			
Arg	Ser	Phe	Arg	Ile	Thr	Ile	Leu	Pro	Gln	Leu	Tyr	Ile	Gln	Pro	Met
	370					375					380				
Met	Gly	Ala	Gly	Leu	Asn	Tyr	Glu	Cys	Tyr	Arg	Phe	Gly	Ile	Ser	Pro
385					390					395					400
Ser	Thr	Asn	Ala	Leu	Val	Ile	Gly	Ala	Thr	Val	Met	Glu	Gly	Phe	Tyr
				405					410					415	
Val	Ile	Phe	Asp	Arg	Ala	Gln	Lys	Arg	Val	Gly	Phe	Ala	Ala	Ser	Pro
			420					425					430		
Cys	Ala	Glu	Ile	Ala	Gly	Ala	Ala	Val	Ser	Glu	Ile	Ser	Gly	Pro	Phe
		435					440					445			
Ser	Thr	Glu	Asp	Val	Ala	Ser	Asn	Cys	Val	Pro	Ala	Gln	Ser	Leu	Ser
	450					455					460				
Glu	Pro	Ile	Leu	Trp	Ile	Val	Ser	Tyr	Ala	Leu	Met	Ser	Val	Cys	Gly

465					470					475					480
Ala	Ile	Leu	Leu	Val	Leu	Ile	Val	Leu	Leu	Leu	Leu	Pro	Phe	Arg	Cys
				485					490					495	
Gln	Arg	Arg	Pro	Arg	Asp	Pro	Glu	Val	Val	Asn	Asp	Glu	Ser	Ser	Leu
			500					505					510		
Val	Arg	His	Arg	Trp	Lys										
		515													

<210> 130
 <211> 423
 <212> PRT
 <213> Homo sapiens

<400> 130

Met	Arg	Ser	Ser	Gly	Ala	Asp	Ala	Gly	Arg	Cys	Leu	Val	Thr	Ala	Arg
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Ala	Pro	Gly	Ser	Val	Pro	Ala	Ser	Arg	Glu	Gly	Ser	Ala	Gly	Ser	Arg
			20					25					30		
Gly	Pro	Gly	Ala	Arg	Phe	Pro	Ala	Arg	Val	Ser	Ala	Arg	Gly	Ser	Ala
		35					40					45			
Pro	Gly	Pro	Gly	Leu	Gly	Gly	Ala	Gly	Ala	Leu	Asp	Pro	Pro	Ala	Val
	50					55					60				
Val	Ala	Glu	Ser	Val	Ser	Ser	Leu	Thr	Ile	Ala	Asp	Ala	Phe	Ile	Ala
65					70					75					80
Ala	Gly	Glu	Ser	Ser	Ala	Pro	Thr	Pro	Pro	Arg	Pro	Ala	Leu	Pro	Arg
				85					90					95	
Arg	Phe	Ile	Cys	Ser	Phe	Pro	Asp	Cys	Ser	Ala	Asn	Tyr	Ser	Lys	Ala
			100					105					110		
Trp	Lys	Leu	Asp	Ala	His	Leu	Cys	Lys	His	Thr	Gly	Glu	Arg	Pro	Phe
		115					120					125			
Val	Cys	Asp	Tyr	Glu	Gly	Cys	Gly	Lys	Ala	Phe	Ile	Arg	Asp	Tyr	His
	130					135					140				
Leu	Ser	Arg	His	Ile	Leu	Thr	His	Thr	Gly	Glu	Lys	Pro	Phe	Val	Cys
145					150					155					160
Ala	Ala	Asn	Gly	Cys	Asp	Gln	Lys	Phe	Asn	Thr	Lys	Ser	Asn	Leu	Lys
				165					170					175	
Lys	His	Phe	Glu	Arg	Lys	His	Glu	Asn	Gln	Gln	Lys	Gln	Tyr	Ile	Cys
		180						185					190		
Ser	Phe	Glu	Asp	Cys	Lys	Lys	Thr	Phe	Lys	Lys	His	Gln	Gln	Leu	Lys
		195					200					205			
Ile	His	Gln	Cys	Gln	Asn	Thr	Asn	Glu	Pro	Leu	Phe	Lys	Cys	Thr	Gln
	210					215					220				
Glu	Gly	Cys	Gly	Lys	His	Phe	Ala	Ser	Pro	Ser	Lys	Leu	Lys	Arg	His
225					230					235					240
Ala	Lys	Ala	His	Glu	Gly	Tyr	Val	Cys	Gln	Lys	Gly	Cys	Ser	Phe	Val
				245					250					255	
Ala	Lys	Thr	Trp	Thr	Glu	Leu	Leu	Lys	His	Val	Arg	Glu	Thr	His	Lys
			260					265					270		
Glu	Glu	Ile	Leu	Cys	Glu	Val	Cys	Arg	Lys	Thr	Phe	Lys	Arg	Lys	Asp
		275					280					285			
Tyr	Leu	Lys	Gln	His	Met	Lys	Thr	His	Ala	Pro	Glu	Arg	Asp	Val	Cys
	290					295					300				
Arg	Cys	Pro	Arg	Glu	Gly	Cys	Gly	Arg	Thr	Tyr	Thr	Thr	Val	Phe	Asn
305					310					315					320
Leu	Gln	Ser	His	Ile	Leu	Ser	Phe	His	Glu	Glu	Ser	Arg	Pro	Phe	Val
				325					330					335	

Cys	Glu	His	Ala	Gly	Cys	Gly	Lys	Thr	Phe	Ala	Met	Lys	Gln	Ser	Leu	
			340					345					350			
Thr	Arg	His	Ala	Val	Val	His	Asp	Pro	Asp	Lys	Lys	Lys	Met	Lys	Leu	
		355					360					365				
Lys	Val	Lys	Lys	Ser	Arg	Glu	Lys	Arg	Glu	Phe	Gly	Leu	Ser	Ser	Gln	
	370					375					380					
Trp	Ile	Tyr	Pro	Pro	Lys	Arg	Lys	Gln	Gly	Gln	Gly	Leu	Ser	Leu	Cys	
385					390					395					400	
Gln	Asn	Gly	Glu	Ser	Pro	Asn	Cys	Val	Glu	Asp	Lys	Met	Leu	Ser	Thr	
			405						410					415		
Val	Ala	Val	Leu	Thr	Leu	Gly										
			420													

<210> 131

<211> 677

<212> PRT

<213> Homo sapiens

<400> 131

Met	Leu	Ser	Ser	Thr	Asp	Phe	Thr	Phe	Ala	Ser	Trp	Glu	Leu	Val	Val	
1				5					10					15		
Arg	Val	Asp	His	Pro	Asn	Glu	Glu	Gln	Lys	Asp	Val	Thr	Leu	Arg		
		20						25				30				
Val	Ser	Gly	Asp	Leu	His	Val	Gly	Gly	Val	Met	Leu	Lys	Leu	Val	Glu	
		35					40					45				
Gln	Ile	Asn	Ile	Ser	Gln	Asp	Trp	Ser	Asp	Phe	Ala	Leu	Trp	Trp	Glu	
	50					55				60						
Gln	Lys	His	Cys	Trp	Leu	Leu	Lys	Thr	His	Trp	Thr	Leu	Asp	Lys	Tyr	
65					70					75					80	
Gly	Val	Gln	Ala	Asp	Ala	Lys	Leu	Leu	Phe	Thr	Pro	Gln	His	Lys	Met	
			85						90					95		
Leu	Arg	Leu	Arg	Leu	Pro	Asn	Leu	Lys	Met	Val	Arg	Leu	Arg	Val	Ser	
			100					105					110			
Phe	Ser	Ala	Val	Val	Phe	Lys	Ala	Val	Ser	Asp	Ile	Cys	Lys	Ile	Leu	
		115				120						125				
Asn	Ile	Arg	Arg	Ser	Glu	Glu	Leu	Ser	Leu	Leu	Lys	Pro	Ser	Gly	Asp	
	130					135					140					
Tyr	Phe	Lys	Lys	Lys	Lys	Lys	Lys	Asp	Lys	Asn	Asn	Lys	Glu	Pro	Ile	
145					150					155					160	
Ile	Glu	Asp	Ile	Leu	Asn	Leu	Glu	Ser	Ser	Pro	Thr	Ala	Ser	Gly	Ser	
			165						170					175		
Ser	Val	Ser	Pro	Gly	Leu	Tyr	Ser	Lys	Thr	Met	Thr	Pro	Ile	Tyr	Asp	
			180					185					190			
Pro	Ile	Asn	Gly	Thr	Pro	Ala	Ser	Ser	Thr	Met	Thr	Trp	Phe	Ser	Asp	
		195					200					205				
Ser	Pro	Leu	Thr	Glu	Gln	Asn	Cys	Ser	Ile	Leu	Ala	Phe	Ser	Gln	Pro	
	210					215					220					
Pro	Gln	Ser	Pro	Glu	Ala	Leu	Ala	Asp	Met	Tyr	Gln	Pro	Arg	Ser	Leu	
225					230					235					240	
Val	Asp	Lys	Ala	Lys	Leu	Asn	Ala	Gly	Trp	Leu	Asp	Ser	Ser	Arg	Ser	
			245						250					255		
Leu	Met	Glu	Gln	Gly	Ile	Gln	Glu	Asp	Glu	Gln	Leu	Leu	Leu	Arg	Phe	
			260					265					270			
Lys	Tyr	Tyr	Ser	Phe	Phe	Asp	Leu	Asn	Pro	Lys	Tyr	Asp	Ala	Val	Arg	
		275				280						285				
Ile	Asn	Gln	Leu	Tyr	Glu	Gln	Ala	Arg	Trp	Ala	Ile	Leu	Leu	Glu	Glu	

450		455		460
Ala Val Cys Ile Glu Asn Ser Cys Met Glu Lys Gly Ser Lys Gln Gly				
465		470		480
Arg Asn Gly Ala Ile His Ile Phe Arg Glu Ile Ile Lys Pro Ala Glu				
	485		490	495
Lys Ser Leu His Glu Lys Leu Lys Gln Asp Lys Arg Phe Ser Thr Phe				
	500		505	510
Leu Ser Leu Leu Glu Ala Ala Asp Leu Lys Glu Leu Leu Thr Gln Pro				
	515		520	525
Gly Asp Trp Thr Leu Phe Val Pro Thr Asn Asp Ala Phe Lys Gly Met				
	530		535	540
Thr Ser Glu Glu Lys Glu Ile Leu Ile Arg Asp Lys Asn Ala Leu Gln				
545		550		560
Asn Ile Ile Leu Tyr His Leu Thr Pro Gly Val Phe Ile Gly Lys Gly				
	565		570	575
Phe Glu Pro Gly Val Thr Asn Ile Leu Lys Thr Thr Gln Gly Ser Lys				
	580		585	590
Ile Phe Leu Lys Glu Val Asn Asp Thr Leu Leu Val Asn Glu Leu Lys				
	595		600	605
Ser Lys Glu Ser Asp Ile Met Thr Thr Asn Gly Val Ile His Val Val				
610		615		620
Asp Lys Leu Leu Tyr Pro Ala Asp Thr Pro Val Gly Asn Asp Gln Leu				
625		630		640
Leu Glu Ile Leu Asn Lys Leu Ile Lys Tyr Ile Gln Ile Lys Phe Val				
	645		650	655
Arg Gly Ser Thr Phe Lys Glu Ile Pro Val Thr Val Tyr Thr Thr Lys				
	660		665	670
Ile Ile Thr Lys Val Val Glu Pro Lys Ile Lys Val Ile Glu Gly Ser				
	675		680	685
Leu Gln Pro Ile Ile Lys Thr Glu Gly Pro Thr Leu Thr Lys Val Lys				
	690		695	700
Ile Glu Gly Glu Pro Glu Phe Arg Leu Ile Lys Glu Gly Glu Thr Ile				
705		710		720
Thr Glu Val Ile His Gly Glu Pro Ile Ile Lys Lys Tyr Thr Lys Ile				
	725		730	735
Ile Asp Gly Val Pro Val Glu Ile Thr Glu Lys Glu Thr Arg Glu Glu				
	740		745	750
Arg Ile Ile Thr Gly Pro Glu Ile Lys Tyr Thr Arg Ile Ser Thr Gly				
	755		760	765
Gly Gly Glu Thr Glu Glu Thr Leu Lys Lys Leu Leu Gln Glu Glu Val				
770		775		780
Thr Lys Val Thr Lys Phe Ile Glu Gly Gly Asp Gly His Leu Phe Glu				
785		790		800
Asp Glu Glu Ile Lys Arg Leu Leu Gln Gly Asp Thr Pro Val Arg Lys				
	805		810	815
Leu Gln Ala Asn Lys Lys Val Gln Gly Ser Arg Arg Arg Leu Arg Glu				
	820		825	830
Gly Arg Ser Gln				
835				

<210> 133
 <211> 303
 <212> PRT
 <213> Homo sapiens

<400> 133

Met	Arg	Ala	Trp	Ile	Phe	Phe	Leu	Leu	Cys	Leu	Ala	Gly	Arg	Ala	Leu
1				5					10					15	
Ala	Ala	Pro	Gln	Gln	Glu	Ala	Leu	Pro	Asp	Glu	Thr	Glu	Val	Val	Glu
			20					25					30		
Glu	Thr	Val	Ala	Glu	Val	Thr	Glu	Val	Ser	Val	Gly	Ala	Asn	Pro	Val
		35					40					45			
Gln	Val	Glu	Val	Gly	Glu	Phe	Asp	Asp	Gly	Ala	Glu	Glu	Thr	Glu	Glu
		50				55					60				
Glu	Val	Val	Ala	Glu	Asn	Pro	Cys	Gln	Asn	His	His	Cys	Lys	His	Gly
65					70					75					80
Lys	Val	Cys	Glu	Leu	Asp	Glu	Asn	Asn	Thr	Pro	Met	Cys	Val	Cys	Gln
				85				90					95		
Asp	Pro	Thr	Ser	Cys	Pro	Ala	Pro	Ile	Gly	Glu	Phe	Glu	Lys	Val	Cys
			100					105					110		
Ser	Asn	Asp	Asn	Lys	Thr	Phe	Asp	Ser	Ser	Cys	His	Phe	Phe	Ala	Thr
		115					120					125			
Lys	Cys	Thr	Leu	Glu	Gly	Thr	Lys	Lys	Gly	His	Lys	Leu	His	Leu	Asp
		130				135					140				
Tyr	Ile	Gly	Pro	Cys	Lys	Tyr	Ile	Pro	Pro	Cys	Leu	Asp	Ser	Glu	Leu
145					150					155					160
Thr	Glu	Phe	Pro	Leu	Arg	Met	Arg	Asp	Trp	Leu	Lys	Asn	Val	Leu	Val
				165					170					175	
Thr	Leu	Tyr	Glu	Arg	Asp	Glu	Asp	Asn	Asn	Leu	Leu	Thr	Glu	Lys	Gln
			180					185					190		
Lys	Leu	Arg	Val	Lys	Lys	Ile	His	Glu	Asn	Glu	Lys	Arg	Leu	Glu	Ala
		195					200					205			
Gly	Asp	His	Pro	Val	Glu	Leu	Leu	Ala	Arg	Asp	Phe	Glu	Lys	Asn	Tyr
		210				215					220				
Asn	Met	Tyr	Ile	Phe	Pro	Val	His	Trp	Gln	Phe	Gly	Gln	Leu	Asp	Gln
225					230					235					240
His	Pro	Ile	Asp	Gly	Tyr	Leu	Ser	His	Thr	Glu	Leu	Ala	Pro	Leu	Arg
			245						250					255	
Ala	Pro	Leu	Ile	Pro	Met	Glu	His	Cys	Thr	Thr	Arg	Phe	Phe	Glu	Thr
			260					265					270		
Cys	Asp	Leu	Asp	Asn	Asp	Lys	Tyr	Ile	Ala	Leu	Asp	Glu	Trp	Ala	Gly
		275					280					285			
Cys	Phe	Gly	Ile	Lys	Gln	Lys	Asp	Ile	Asp	Lys	Asp	Leu	Val	Ile	
		290				295					300				

<210> 134

<211> 683

<212> PRT

<213> Homo sapiens

<400> 134

Met	Ala	Leu	Phe	Val	Arg	Leu	Leu	Ala	Leu	Ala	Leu	Ala	Leu	Ala	Leu
1				5					10					15	
Gly	Pro	Ala	Ala	Thr	Leu	Ala	Gly	Pro	Ala	Lys	Ser	Pro	Tyr	Gln	Leu
			20					25					30		
Val	Leu	Gln	His	Ser	Arg	Leu	Arg	Gly	Arg	Gln	His	Gly	Pro	Asn	Val
		35					40					45			
Cys	Ala	Val	Gln	Lys	Val	Ile	Gly	Thr	Asn	Arg	Lys	Tyr	Phe	Thr	Asn
		50				55					60				
Cys	Lys	Gln	Trp	Tyr	Gln	Arg	Lys	Ile	Cys	Gly	Lys	Ser	Thr	Val	Ile
65					70					75					80
Ser	Tyr	Glu	Cys	Cys	Pro	Gly	Tyr	Glu	Lys	Val	Pro	Gly	Glu	Lys	Gly

				85					90					95			
Cys	Pro	Ala	Ala	Leu	Pro	Leu	Ser	Asn	Leu	Tyr	Glu	Thr	Leu	Gly	Val		
			100					105					110				
Val	Gly	Ser	Thr	Thr	Thr	Gln	Leu	Tyr	Thr	Asp	Arg	Thr	Glu	Lys	Leu		
		115					120					125					
Arg	Pro	Glu	Met	Glu	Gly	Pro	Gly	Ser	Phe	Thr	Ile	Phe	Ala	Pro	Ser		
	130					135					140						
Asn	Glu	Ala	Trp	Ala	Ser	Leu	Pro	Ala	Glu	Val	Leu	Asp	Ser	Leu	Val		
	145				150					155					160		
Ser	Asn	Val	Asn	Ile	Glu	Leu	Leu	Asn	Ala	Leu	Arg	Tyr	His	Met	Val		
			165						170					175			
Gly	Arg	Arg	Val	Leu	Thr	Asp	Glu	Leu	Lys	His	Gly	Met	Thr	Leu	Thr		
			180				185					190					
Ser	Met	Tyr	Gln	Asn	Ser	Asn	Ile	Gln	Ile	His	His	Tyr	Pro	Asn	Gly		
		195				200						205					
Ile	Val	Thr	Val	Asn	Cys	Ala	Arg	Leu	Leu	Lys	Ala	Asp	His	His	Ala		
	210					215					220						
Thr	Asn	Gly	Val	Val	His	Leu	Ile	Asp	Lys	Val	Ile	Ser	Thr	Ile	Thr		
	225				230					235					240		
Asn	Asn	Ile	Gln	Gln	Ile	Ile	Glu	Ile	Glu	Asp	Thr	Phe	Glu	Thr	Leu		
			245						250					255			
Arg	Ala	Ala	Val	Ala	Ala	Ser	Gly	Leu	Asn	Thr	Met	Leu	Glu	Gly	Asn		
		260						265					270				
Gly	Gln	Tyr	Thr	Leu	Leu	Ala	Pro	Thr	Asn	Glu	Ala	Phe	Glu	Lys	Ile		
		275					280				285						
Pro	Ser	Glu	Thr	Leu	Asn	Arg	Ile	Leu	Gly	Asp	Pro	Glu	Ala	Leu	Arg		
	290				295						300						
Asp	Leu	Leu	Asn	Asn	His	Ile	Leu	Lys	Ser	Ala	Met	Cys	Ala	Glu	Ala		
	305			310						315					320		
Ile	Val	Ala	Gly	Leu	Ser	Val	Glu	Thr	Leu	Glu	Gly	Thr	Thr	Leu	Glu		
			325						330					335			
Val	Gly	Cys	Ser	Gly	Asp	Met	Leu	Thr	Ile	Asn	Gly	Lys	Ala	Ile	Ile		
		340						345					350				
Ser	Asn	Lys	Asp	Ile	Leu	Ala	Thr	Asn	Gly	Val	Ile	His	Tyr	Ile	Asp		
		355					360					365					
Glu	Leu	Leu	Ile	Pro	Asp	Ser	Ala	Lys	Thr	Leu	Phe	Glu	Leu	Ala	Ala		
	370				375						380						
Glu	Ser	Asp	Val	Ser	Thr	Ala	Ile	Asp	Leu	Phe	Arg	Gln	Ala	Gly	Leu		
	385				390					395					400		
Gly	Asn	His	Leu	Ser	Gly	Ser	Glu	Arg	Leu	Thr	Leu	Leu	Ala	Pro	Leu		
			405					410						415			
Asn	Ser	Val	Phe	Lys	Asp	Gly	Thr	Pro	Ile	Asp	Ala	His	Thr	Arg			
		420						425				430					
Asn	Leu	Leu	Arg	Asn	His	Ile	Ile	Lys	Asp	Gln	Leu	Ala	Ser	Lys	Tyr		
		435					440					445					
Leu	Tyr	His	Gly	Gln	Thr	Leu	Glu	Thr	Leu	Gly	Gly	Lys	Lys	Leu	Arg		
	450					455					460						
Val	Phe	Val	Tyr	Arg	Asn	Ser	Leu	Cys	Ile	Glu	Asn	Ser	Cys	Ile	Ala		
	465				470					475					480		
Ala	His	Asp	Lys	Arg	Gly	Arg	Tyr	Gly	Thr	Leu	Phe	Thr	Met	Asp	Arg		
				485					490					495			
Val	Leu	Thr	Pro	Pro	Met	Gly	Thr	Val	Met	Asp	Val	Leu	Lys	Gly	Asp		
			500					505					510				
Asn	Arg	Phe	Ser	Met	Leu	Val	Ala	Ala	Ile	Gln	Ser	Ala	Gly	Leu	Thr		
		515					520					525					
Glu	Thr	Leu	Asn	Arg	Glu	Gly	Val	Tyr	Thr	Val	Phe	Ala	Pro	Thr	Asn		
	530					535					540						

Glu	Ala	Phe	Arg	Ala	Leu	Pro	Pro	Arg	Glu	Arg	Ser	Arg	Leu	Leu	Gly
545					550					555					560
Asp	Ala	Lys	Glu	Leu	Ala	Asn	Ile	Leu	Lys	Tyr	His	Ile	Gly	Asp	Glu
			565						570					575	
Ile	Leu	Val	Ser	Gly	Gly	Ile	Gly	Ala	Leu	Val	Arg	Leu	Lys	Ser	Leu
		580						585					590		
Gln	Gly	Asp	Lys	Leu	Glu	Val	Ser	Leu	Lys	Asn	Asn	Val	Val	Ser	Val
		595					600					605			
Asn	Lys	Glu	Pro	Val	Ala	Glu	Pro	Asp	Ile	Met	Ala	Thr	Asn	Gly	Val
	610					615					620				
Val	His	Val	Ile	Thr	Asn	Val	Leu	Gln	Pro	Pro	Ala	Asn	Arg	Pro	Gln
625					630					635					640
Glu	Arg	Gly	Asp	Glu	Leu	Ala	Asp	Ser	Ala	Leu	Glu	Ile	Phe	Lys	Gln
			645						650					655	
Ala	Ser	Ala	Phe	Ser	Arg	Ala	Ser	Gln	Arg	Ser	Val	Arg	Leu	Ala	Pro
			660					665					670		
Val	Tyr	Gln	Lys	Leu	Leu	Glu	Arg	Met	Lys	His					
		675					680								

<210> 135
 <211> 2355
 <212> PRT
 <213> Homo sapiens

<400> 135

Met	Leu	Arg	Gly	Pro	Gly	Pro	Gly	Leu	Leu	Leu	Leu	Ala	Val	Gln	Cys
1				5				10						15	
Leu	Gly	Thr	Ala	Val	Pro	Ser	Thr	Gly	Ala	Ser	Lys	Ser	Lys	Arg	Gln
			20					25					30		
Ala	Gln	Gln	Met	Val	Gln	Pro	Gln	Ser	Pro	Val	Ala	Val	Ser	Gln	Ser
		35					40					45			
Lys	Pro	Gly	Cys	Tyr	Asp	Asn	Gly	Lys	His	Tyr	Gln	Ile	Asn	Gln	Gln
	50					55					60				
Trp	Glu	Arg	Thr	Tyr	Leu	Gly	Asn	Ala	Leu	Val	Cys	Thr	Cys	Tyr	Gly
65					70					75					80
Gly	Ser	Arg	Gly	Phe	Asn	Cys	Glu	Ser	Lys	Pro	Glu	Ala	Glu	Glu	Thr
				85					90					95	
Cys	Phe	Asp	Lys	Tyr	Thr	Gly	Asn	Thr	Tyr	Arg	Val	Gly	Asp	Thr	Tyr
			100					105					110		
Glu	Arg	Pro	Lys	Asp	Ser	Met	Ile	Trp	Asp	Cys	Thr	Cys	Ile	Gly	Ala
		115					120					125			
Gly	Arg	Gly	Arg	Ile	Ser	Cys	Thr	Ile	Ala	Asn	Arg	Cys	His	Glu	Gly
	130					135					140				
Gly	Gln	Ser	Tyr	Lys	Ile	Gly	Asp	Thr	Trp	Arg	Arg	Pro	His	Glu	Thr
145					150					155					160
Gly	Gly	Tyr	Met	Leu	Glu	Cys	Val	Cys	Leu	Gly	Asn	Gly	Lys	Gly	Glu
			165						170					175	
Trp	Thr	Cys	Lys	Pro	Ile	Ala	Glu	Lys	Cys	Phe	Asp	His	Ala	Ala	Gly
			180					185					190		
Thr	Ser	Tyr	Val	Val	Gly	Glu	Thr	Trp	Glu	Lys	Pro	Tyr	Gln	Gly	Trp
		195					200						205		
Met	Met	Val	Asp	Cys	Thr	Cys	Leu	Gly	Glu	Gly	Ser	Gly	Arg	Ile	Thr
	210					215						220			
Cys	Thr	Ser	Arg	Asn	Arg	Cys	Asn	Asp	Gln	Asp	Thr	Arg	Thr	Ser	Tyr
225					230					235					240
Arg	Ile	Gly	Asp	Thr	Trp	Ser	Lys	Lys	Asp	Asn	Arg	Gly	Asn	Leu	Leu

				245					250					255			
Gln	Cys	Ile	Cys	Thr	Gly	Asn	Gly	Arg	Gly	Glu	Trp	Lys	Cys	Glu	Arg		
			260					265					270				
His	Thr	Ser	Val	Gln	Thr	Thr	Ser	Ser	Gly	Ser	Gly	Pro	Phe	Thr	Asp		
		275					280					285					
Val	Arg	Ala	Ala	Val	Tyr	Gln	Pro	Gln	Pro	His	Pro	Gln	Pro	Pro	Pro		
	290					295					300						
Tyr	Gly	His	Cys	Val	Thr	Asp	Ser	Gly	Val	Val	Tyr	Ser	Val	Gly	Met		
305					310					315					320		
Gln	Trp	Leu	Lys	Thr	Gln	Gly	Asn	Lys	Gln	Met	Leu	Cys	Thr	Cys	Leu		
				325					330					335			
Gly	Asn	Gly	Val	Ser	Cys	Gln	Glu	Thr	Ala	Val	Thr	Gln	Thr	Tyr	Gly		
			340					345					350				
Gly	Asn	Ser	Asn	Gly	Glu	Pro	Cys	Val	Leu	Pro	Phe	Thr	Tyr	Asn	Gly		
	355						360					365					
Arg	Thr	Phe	Tyr	Ser	Cys	Thr	Thr	Glu	Gly	Arg	Gln	Asp	Gly	His	Leu		
	370					375					380						
Trp	Cys	Ser	Thr	Thr	Ser	Asn	Tyr	Glu	Gln	Asp	Gln	Lys	Tyr	Ser	Phe		
385					390					395					400		
Cys	Thr	Asp	His	Thr	Val	Leu	Val	Gln	Thr	Arg	Gly	Gly	Asn	Ser	Asn		
				405					410					415			
Gly	Ala	Leu	Cys	His	Phe	Pro	Phe	Leu	Tyr	Asn	Asn	His	Asn	Tyr	Thr		
		420						425					430				
Asp	Cys	Thr	Ser	Glu	Gly	Arg	Arg	Asp	Asn	Met	Lys	Trp	Cys	Gly	Thr		
	435						440					445					
Thr	Gln	Asn	Tyr	Asp	Ala	Asp	Gln	Lys	Phe	Gly	Phe	Cys	Pro	Met	Ala		
	450					455					460						
Ala	His	Glu	Glu	Ile	Cys	Thr	Thr	Asn	Glu	Gly	Val	Met	Tyr	Arg	Ile		
465					470					475					480		
Gly	Asp	Gln	Trp	Asp	Lys	Gln	His	Asp	Met	Gly	His	Met	Met	Arg	Cys		
				485					490					495			
Thr	Cys	Val	Gly	Asn	Gly	Arg	Gly	Glu	Trp	Thr	Cys	Ile	Ala	Tyr	Ser		
		500						505					510				
Gln	Leu	Arg	Asp	Gln	Cys	Ile	Val	Asp	Asp	Ile	Thr	Tyr	Asn	Val	Asn		
		515					520					525					
Asp	Thr	Phe	His	Lys	Arg	His	Glu	Glu	Gly	His	Met	Leu	Asn	Cys	Thr		
	530					535					540						
Cys	Phe	Gly	Gln	Gly	Arg	Gly	Arg	Trp	Lys	Cys	Asp	Pro	Val	Asp	Gln		
545					550					555					560		
Cys	Gln	Asp	Ser	Glu	Thr	Gly	Thr	Phe	Tyr	Gln	Ile	Gly	Asp	Ser	Trp		
			565						570					575			
Glu	Lys	Tyr	Val	His	Gly	Val	Arg	Tyr	Gln	Cys	Tyr	Cys	Tyr	Gly	Arg		
			580					585					590				
Gly	Ile	Gly	Glu	Trp	His	Cys	Gln	Pro	Leu	Gln	Thr	Tyr	Pro	Ser	Ser		
		595					600					605					
Ser	Gly	Pro	Val	Glu	Val	Phe	Ile	Thr	Glu	Thr	Pro	Ser	Gln	Pro	Asn		
	610					615					620						
Ser	His	Pro	Ile	Gln	Trp	Asn	Ala	Pro	Gln	Pro	Ser	His	Ile	Ser	Lys		
625					630					635					640		
Tyr	Ile	Leu	Arg	Trp	Arg	Pro	Lys	Asn	Ser	Val	Gly	Arg	Trp	Lys	Glu		
			645						650					655			
Ala	Thr	Ile	Pro	Gly	His	Leu	Asn	Ser	Tyr	Thr	Ile	Lys	Gly	Leu	Lys		
			660					665					670				
Pro	Gly	Val	Val	Tyr	Glu	Gly	Gln	Leu	Ile	Ser	Ile	Gln	Gln	Tyr	Gly		
		675					680					685					
His	Gln	Glu	Val	Thr	Arg	Phe	Asp	Phe	Thr	Thr	Thr	Ser	Thr	Ser	Thr		
	690					695					700						

Pro	Val	Thr	Ser	Asn	Thr	Val	Thr	Gly	Glu	Thr	Thr	Pro	Phe	Ser	Pro	705	710	715	720
Leu	Val	Ala	Thr	Ser	Glu	Ser	Val	Thr	Glu	Ile	Thr	Ala	Ser	Ser	Phe	725	730	735	
Val	Val	Ser	Trp	Val	Ser	Ala	Ser	Asp	Thr	Val	Ser	Gly	Phe	Arg	Val	740	745	750	
Glu	Tyr	Glu	Leu	Ser	Glu	Glu	Gly	Asp	Glu	Pro	Gln	Tyr	Leu	Asp	Leu	755	760	765	
Pro	Ser	Thr	Ala	Thr	Ser	Val	Asn	Ile	Pro	Asp	Leu	Leu	Pro	Gly	Arg	770	775	780	
Lys	Tyr	Ile	Val	Asn	Val	Tyr	Gln	Ile	Ser	Glu	Asp	Gly	Glu	Gln	Ser	785	790	795	800
Leu	Ile	Leu	Ser	Thr	Ser	Gln	Thr	Thr	Ala	Pro	Asp	Ala	Pro	Pro	Asp	805	810	815	
Pro	Thr	Val	Asp	Gln	Val	Asp	Asp	Thr	Ser	Ile	Val	Val	Arg	Trp	Ser	820	825	830	
Arg	Pro	Gln	Ala	Pro	Ile	Thr	Gly	Tyr	Arg	Ile	Val	Tyr	Ser	Pro	Ser	835	840	845	
Val	Glu	Gly	Ser	Ser	Thr	Glu	Leu	Asn	Leu	Pro	Glu	Thr	Ala	Asn	Ser	850	855	860	
Val	Thr	Leu	Ser	Asp	Leu	Gln	Pro	Gly	Val	Gln	Tyr	Asn	Ile	Thr	Ile	865	870	875	880
Tyr	Ala	Val	Glu	Glu	Asn	Gln	Glu	Ser	Thr	Pro	Val	Val	Ile	Gln	Gln	885	890	895	
Glu	Thr	Thr	Gly	Thr	Pro	Arg	Ser	Asp	Thr	Val	Pro	Ser	Pro	Arg	Asp	900	905	910	
Leu	Gln	Phe	Val	Glu	Val	Thr	Asp	Val	Lys	Val	Thr	Ile	Met	Trp	Thr	915	920	925	
Pro	Pro	Glu	Ser	Ala	Val	Thr	Gly	Tyr	Arg	Val	Asp	Val	Ile	Pro	Val	930	935	940	
Asn	Leu	Pro	Gly	Glu	His	Gly	Gln	Arg	Leu	Pro	Ile	Ser	Arg	Asn	Thr	945	950	955	960
Phe	Ala	Glu	Val	Thr	Gly	Leu	Ser	Pro	Gly	Val	Thr	Tyr	Tyr	Phe	Lys	965	970	975	
Val	Phe	Ala	Val	Ser	His	Gly	Arg	Glu	Ser	Lys	Pro	Leu	Thr	Ala	Gln	980	985	990	
Gln	Thr	Thr	Lys	Leu	Asp	Ala	Pro	Thr	Asn	Leu	Gln	Phe	Val	Asn	Glu	995	1000	1005	
Thr	Asp	Ser	Thr	Val	Leu	Val	Arg	Trp	Thr	Pro	Pro	Arg	Ala	Gln	Ile	1010	1015	1020	
Thr	Gly	Tyr	Arg	Leu	Thr	Val	Gly	Leu	Thr	Arg	Arg	Gly	Gln	Pro	Arg	1025	1030	1035	1040
Gln	Tyr	Asn	Val	Gly	Pro	Ser	Val	Ser	Lys	Tyr	Pro	Leu	Arg	Asn	Leu	1045	1050	1055	
Gln	Pro	Ala	Ser	Glu	Tyr	Thr	Val	Ser	Leu	Val	Ala	Ile	Lys	Gly	Asn	1060	1065	1070	
Gln	Glu	Ser	Pro	Lys	Ala	Thr	Gly	Val	Phe	Thr	Thr	Leu	Gln	Pro	Gly	1075	1080	1085	
Ser	Ser	Ile	Pro	Pro	Tyr	Asn	Thr	Glu	Val	Thr	Glu	Thr	Thr	Ile	Val	1090	1095	1100	
Ile	Thr	Trp	Thr	Pro	Ala	Pro	Arg	Ile	Gly	Phe	Lys	Leu	Gly	Val	Arg	1105	1110	1115	1120
Pro	Ser	Gln	Gly	Gly	Glu	Ala	Pro	Arg	Glu	Val	Thr	Ser	Asp	Ser	Gly	1125	1130	1135	
Ser	Ile	Val	Val	Ser	Gly	Leu	Thr	Pro	Gly	Val	Glu	Tyr	Val	Tyr	Thr	1140	1145	1150	
Ile	Gln	Val	Leu	Arg	Asp	Gly	Gln	Glu	Arg	Asp	Ala	Pro	Ile	Val	Asn				

Pro Ser Gly Glu Ser Gln Pro Leu Val Gln Thr Ala Val Thr Asn Ile
 1620 1625 1630
 Asp Arg Pro Lys Gly Leu Ala Phe Thr Asp Val Asp Val Asp Ser Ile
 1635 1640 1645
 Lys Ile Ala Trp Glu Ser Pro Gln Gly Gln Val Ser Arg Tyr Arg Val
 1650 1655 1660
 Thr Tyr Ser Ser Pro Glu Asp Gly Ile His Glu Leu Phe Pro Ala Pro
 1665 1670 1675 1680
 Asp Gly Glu Glu Asp Thr Ala Glu Leu Gln Gly Leu Arg Pro Gly Ser
 1685 1690 1695
 Glu Tyr Thr Val Ser Val Val Ala Leu His Asp Asp Met Glu Ser Gln
 1700 1705 1710
 Pro Leu Ile Gly Thr Gln Ser Thr Ala Ile Pro Ala Pro Thr Asp Leu
 1715 1720 1725
 Lys Phe Thr Gln Val Thr Pro Thr Ser Leu Ser Ala Gln Trp Thr Pro
 1730 1735 1740
 Pro Asn Val Gln Leu Thr Gly Tyr Arg Val Arg Val Thr Pro Lys Glu
 1745 1750 1755 1760
 Lys Thr Gly Pro Met Lys Glu Ile Asn Leu Ala Pro Asp Ser Ser Ser
 1765 1770 1775
 Val Val Val Ser Gly Leu Met Val Ala Thr Lys Tyr Glu Val Ser Val
 1780 1785 1790
 Tyr Ala Leu Lys Asp Thr Leu Thr Ser Arg Pro Ala Gln Gly Val Val
 1795 1800 1805
 Thr Thr Leu Glu Asn Val Ser Pro Pro Arg Arg Ala Arg Val Thr Asp
 1810 1815 1820
 Ala Thr Glu Thr Thr Ile Thr Ile Ser Trp Arg Thr Lys Thr Glu Thr
 1825 1830 1835 1840
 Ile Thr Gly Phe Gln Val Asp Ala Val Pro Ala Asn Gly Gln Thr Pro
 1845 1850 1855
 Ile Gln Arg Thr Ile Lys Pro Asp Val Arg Ser Tyr Thr Ile Thr Gly
 1860 1865 1870
 Leu Gln Pro Gly Thr Asp Tyr Lys Ile Tyr Leu Tyr Thr Leu Asn Asp
 1875 1880 1885
 Asn Ala Arg Ser Ser Pro Val Val Ile Asp Ala Ser Thr Ala Ile Asp
 1890 1895 1900
 Ala Pro Ser Asn Leu Arg Phe Leu Ala Thr Thr Pro Asn Ser Leu Leu
 1905 1910 1915 1920
 Val Ser Trp Gln Pro Pro Arg Ala Arg Ile Thr Gly Tyr Ile Ile Lys
 1925 1930 1935
 Tyr Glu Lys Pro Gly Ser Pro Pro Arg Glu Val Val Pro Arg Pro Arg
 1940 1945 1950
 Pro Gly Val Thr Glu Ala Thr Ile Thr Gly Leu Glu Pro Gly Thr Glu
 1955 1960 1965
 Tyr Thr Ile Tyr Val Ile Ala Leu Lys Asn Asn Gln Lys Ser Glu Pro
 1970 1975 1980
 Leu Ile Gly Arg Lys Lys Thr Asp Glu Leu Pro Gln Leu Val Thr Leu
 1985 1990 1995 2000
 Pro His Pro Asn Leu His Gly Pro Glu Ile Leu Asp Val Pro Ser Thr
 2005 2010 2015
 Val Gln Lys Thr Pro Phe Val Thr His Pro Gly Tyr Asp Thr Gly Asn
 2020 2025 2030
 Gly Ile Gln Leu Pro Gly Thr Ser Gly Gln Gln Pro Ser Val Gly Gln
 2035 2040 2045
 Gln Met Ile Phe Glu Glu His Gly Phe Arg Arg Thr Thr Pro Pro Thr
 2050 2055 2060
 Thr Ala Thr Pro Ile Arg His Arg Pro Arg Pro Tyr Pro Pro Asn Val

2065					2070					2075				2080	
Gly	Gln	Glu	Ala	Leu	Ser	Gln	Thr	Thr	Ile	Ser	Trp	Ala	Pro	Phe	Gln
				2085					2090					2095	
Asp	Thr	Ser	Glu	Tyr	Ile	Ile	Ser	Cys	His	Pro	Val	Gly	Thr	Asp	Glu
			2100					2105					2110		
Glu	Pro	Leu	Gln	Phe	Arg	Val	Pro	Gly	Thr	Ser	Thr	Ser	Ala	Thr	Leu
		2115					2120					2125			
Thr	Gly	Leu	Thr	Arg	Gly	Ala	Thr	Tyr	Asn	Ile	Ile	Val	Glu	Ala	Leu
	2130					2135					2140				
Lys	Asp	Gln	Gln	Arg	His	Lys	Val	Arg	Glu	Glu	Val	Val	Thr	Val	Gly
2145					2150				2155						2160
Asn	Ser	Val	Asn	Glu	Gly	Leu	Asn	Gln	Pro	Thr	Asp	Asp	Ser	Cys	Phe
			2165					2170						2175	
Asp	Pro	Tyr	Thr	Val	Ser	His	Tyr	Ala	Val	Gly	Asp	Glu	Trp	Glu	Arg
			2180					2185					2190		
Met	Ser	Glu	Ser	Gly	Phe	Lys	Leu	Leu	Cys	Gln	Cys	Leu	Gly	Phe	Gly
		2195					2200					2205			
Ser	Gly	His	Phe	Arg	Cys	Asp	Ser	Ser	Arg	Trp	Cys	His	Asp	Asn	Gly
	2210					2215					2220				
Val	Asn	Tyr	Lys	Ile	Gly	Glu	Lys	Trp	Asp	Arg	Gln	Gly	Glu	Asn	Gly
2225					2230				2235						2240
Gln	Met	Met	Ser	Cys	Thr	Cys	Leu	Gly	Asn	Gly	Lys	Gly	Glu	Phe	Lys
			2245					2250						2255	
Cys	Asp	Pro	His	Glu	Ala	Thr	Cys	Tyr	Asp	Asp	Gly	Lys	Thr	Tyr	His
			2260					2265					2270		
Val	Gly	Glu	Gln	Trp	Gln	Lys	Glu	Tyr	Leu	Gly	Ala	Ile	Cys	Ser	Cys
		2275					2280					2285			
Thr	Cys	Phe	Gly	Gly	Gln	Arg	Gly	Trp	Arg	Cys	Asp	Asn	Cys	Arg	Arg
	2290					2295					2300				
Pro	Gly	Gly	Glu	Pro	Ser	Pro	Glu	Gly	Thr	Thr	Gly	Gln	Ser	Tyr	Asn
2305					2310				2315						2320
Gln	Tyr	Ser	Gln	Arg	Tyr	His	Gln	Arg	Thr	Asn	Thr	Asn	Val	Asn	Cys
			2325					2330						2335	
Pro	Ile	Glu	Cys	Phe	Met	Pro	Leu	Asp	Val	Gln	Ala	Asp	Arg	Glu	Asp
			2340					2345					2350		
Ser	Arg	Glu													
		2355													

<210> 136
 <211> 1366
 <212> PRT
 <213> Homo sapiens

<400> 136

Met	Leu	Ser	Phe	Val	Asp	Thr	Arg	Thr	Leu	Leu	Leu	Leu	Ala	Val	Thr
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Leu	Cys	Leu	Ala	Thr	Cys	Gln	Ser	Leu	Gln	Glu	Glu	Thr	Val	Arg	Lys
			20					25					30		
Gly	Pro	Ala	Gly	Asp	Arg	Gly	Pro	Arg	Gly	Glu	Arg	Gly	Pro	Pro	Gly
		35					40					45			
Pro	Pro	Gly	Arg	Asp	Gly	Glu	Asp	Gly	Pro	Thr	Gly	Pro	Pro	Gly	Pro
	50					55					60				
Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Leu	Gly	Gly	Asn	Phe	Ala	Ala	Gln
65					70				75						80
Tyr	Asp	Gly	Lys	Gly	Val	Gly	Leu	Gly	Pro	Gly	Pro	Met	Gly	Leu	Met
			85						90					95	

Gly	Pro	Arg	Gly	Pro	Pro	Gly	Ala	Ala	Gly	Ala	Pro	Gly	Pro	Gln	Gly
			100					105					110		
Phe	Gln	Gly	Pro	Ala	Gly	Glu	Pro	Gly	Glu	Pro	Gly	Gln	Thr	Gly	Pro
		115					120					125			
Ala	Gly	Ala	Arg	Gly	Pro	Ala	Gly	Pro	Pro	Gly	Lys	Ala	Gly	Glu	Asp
	130					135					140				
Gly	His	Pro	Gly	Lys	Pro	Gly	Arg	Pro	Gly	Glu	Arg	Gly	Val	Val	Gly
145					150					155					160
Pro	Gln	Gly	Ala	Arg	Gly	Phe	Pro	Gly	Thr	Pro	Gly	Leu	Pro	Gly	Phe
			165						170					175	
Lys	Gly	Ile	Arg	Gly	His	Asn	Gly	Leu	Asp	Gly	Leu	Lys	Gly	Gln	Pro
			180				185						190		
Gly	Ala	Pro	Gly	Val	Lys	Gly	Glu	Pro	Gly	Ala	Pro	Gly	Glu	Asn	Gly
		195					200					205			
Thr	Pro	Gly	Gln	Thr	Gly	Ala	Arg	Gly	Leu	Pro	Gly	Glu	Arg	Gly	Arg
	210					215					220				
Val	Gly	Ala	Pro	Gly	Pro	Ala	Gly	Ala	Arg	Gly	Ser	Asp	Gly	Ser	Val
225					230					235					240
Gly	Pro	Val	Gly	Pro	Ala	Gly	Pro	Ile	Gly	Ser	Ala	Gly	Pro	Pro	Gly
				245					250					255	
Phe	Pro	Gly	Ala	Pro	Gly	Pro	Lys	Gly	Glu	Ile	Gly	Ala	Val	Gly	Asn
			260					265					270		
Ala	Gly	Pro	Ala	Gly	Pro	Ala	Gly	Pro	Arg	Gly	Glu	Val	Gly	Leu	Pro
		275					280					285			
Gly	Leu	Ser	Gly	Pro	Val	Gly	Pro	Pro	Gly	Asn	Pro	Gly	Ala	Asn	Gly
	290					295				300					
Leu	Thr	Gly	Ala	Lys	Gly	Ala	Ala	Gly	Leu	Pro	Gly	Val	Ala	Gly	Ala
305					310					315					320
Pro	Gly	Leu	Pro	Gly	Pro	Arg	Gly	Ile	Pro	Gly	Pro	Val	Gly	Ala	Ala
				325					330					335	
Gly	Ala	Thr	Gly	Ala	Arg	Gly	Leu	Val	Gly	Glu	Pro	Gly	Pro	Ala	Gly
			340					345					350		
Ser	Lys	Gly	Glu	Ser	Gly	Asn	Lys	Gly	Glu	Pro	Gly	Ser	Ala	Gly	Pro
		355				360						365			
Gln	Gly	Pro	Pro	Gly	Pro	Ser	Gly	Glu	Glu	Gly	Lys	Arg	Gly	Pro	Asn
	370					375					380				
Gly	Glu	Ala	Gly	Ser	Ala	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Leu	Arg	Gly
385					390					395					400
Ser	Pro	Gly	Ser	Arg	Gly	Leu	Pro	Gly	Ala	Asp	Gly	Arg	Ala	Gly	Val
				405					410					415	
Met	Gly	Pro	Pro	Gly	Ser	Arg	Gly	Ala	Ser	Gly	Pro	Ala	Gly	Val	Arg
			420					425					430		
Gly	Pro	Asn	Gly	Asp	Ala	Gly	Arg	Pro	Gly	Glu	Pro	Gly	Leu	Met	Gly
		435					440					445			
Pro	Arg	Gly	Leu	Pro	Gly	Ser	Pro	Gly	Asn	Ile	Gly	Pro	Ala	Gly	Lys
		450				455					460				
Glu	Gly	Pro	Val	Gly	Leu	Pro	Gly	Ile	Asp	Gly	Arg	Pro	Gly	Pro	Ile
465					470					475					480
Gly	Pro	Ala	Gly	Ala	Arg	Gly	Glu	Pro	Gly	Asn	Ile	Gly	Phe	Pro	Gly
				485					490					495	
Pro	Lys	Gly	Pro	Thr	Gly	Asp	Pro	Gly	Lys	Asn	Gly	Asp	Lys	Gly	His
			500					505					510		
Ala	Gly	Leu	Ala	Gly	Ala	Arg	Gly	Ala	Pro	Gly	Pro	Asp	Gly	Asn	Asn
		515					520					525			
Gly	Ala	Gln	Gly	Pro	Pro	Gly	Pro	Gln	Gly	Val	Gln	Gly	Gly	Lys	Gly
	530					535					540				
Glu	Gln	Gly	Pro	Ala	Gly	Pro	Pro	Gly	Phe	Gln	Gly	Leu	Pro	Gly	Pro

545					550					555					560
Ser	Gly	Pro	Ala	Gly	Glu	Val	Gly	Lys	Pro	Gly	Glu	Arg	Gly	Leu	His
				565					570					575	
Gly	Glu	Phe	Gly	Leu	Pro	Gly	Pro	Ala	Gly	Pro	Arg	Gly	Glu	Arg	Gly
			580					585					590		
Pro	Pro	Gly	Glu	Ser	Gly	Ala	Ala	Gly	Pro	Thr	Gly	Pro	Ile	Gly	Ser
		595					600					605			
Arg	Gly	Pro	Ser	Gly	Pro	Pro	Gly	Pro	Asp	Gly	Asn	Lys	Gly	Glu	Pro
	610					615					620				
Gly	Val	Val	Gly	Ala	Val	Gly	Thr	Ala	Gly	Pro	Ser	Gly	Pro	Ser	Gly
625					630					635					640
Leu	Pro	Gly	Glu	Arg	Gly	Ala	Ala	Gly	Ile	Pro	Gly	Gly	Lys	Gly	Glu
				645					650					655	
Lys	Gly	Glu	Pro	Gly	Leu	Arg	Gly	Glu	Ile	Gly	Asn	Pro	Gly	Arg	Asp
			660					665					670		
Gly	Ala	Arg	Gly	Ala	His	Gly	Ala	Val	Gly	Ala	Pro	Gly	Pro	Ala	Gly
		675					680					685			
Ala	Thr	Gly	Asp	Arg	Gly	Glu	Ala	Gly	Ala	Ala	Gly	Pro	Ala	Gly	Pro
	690					695					700				
Ala	Gly	Pro	Arg	Gly	Ser	Pro	Gly	Glu	Arg	Gly	Glu	Val	Gly	Pro	Ala
705					710					715					720
Gly	Pro	Asn	Gly	Phe	Ala	Gly	Pro	Ala	Gly	Ala	Ala	Gly	Gln	Pro	Gly
			725						730					735	
Ala	Lys	Gly	Glu	Arg	Gly	Ala	Lys	Gly	Pro	Lys	Gly	Glu	Asn	Gly	Val
			740					745					750		
Val	Gly	Pro	Thr	Gly	Pro	Val	Gly	Ala	Ala	Gly	Pro	Ala	Gly	Pro	Asn
		755					760					765			
Gly	Pro	Pro	Gly	Pro	Ala	Gly	Ser	Arg	Gly	Asp	Gly	Gly	Pro	Pro	Gly
	770					775					780				
Met	Thr	Gly	Phe	Pro	Gly	Ala	Ala	Gly	Arg	Thr	Gly	Pro	Pro	Gly	Pro
785					790					795					800
Ser	Gly	Ile	Ser	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Pro	Ala	Gly	Lys	Glu
				805					810					815	
Gly	Leu	Arg	Gly	Pro	Arg	Gly	Asp	Gln	Gly	Pro	Val	Gly	Arg	Thr	Gly
			820					825					830		
Glu	Val	Gly	Ala	Val	Gly	Pro	Pro	Gly	Phe	Ala	Gly	Glu	Lys	Gly	Pro
		835						840				845			
Ser	Gly	Glu	Ala	Gly	Thr	Ala	Gly	Pro	Pro	Gly	Thr	Pro	Gly	Pro	Gln
	850					855					860				
Gly	Leu	Leu	Gly	Ala	Pro	Gly	Ile	Leu	Gly	Leu	Pro	Gly	Ser	Arg	Gly
865					870					875					880
Glu	Arg	Gly	Leu	Pro	Gly	Val	Ala	Gly	Ala	Val	Gly	Glu	Pro	Gly	Pro
				885					890					895	
Leu	Gly	Ile	Ala	Gly	Pro	Pro	Gly	Ala	Arg	Gly	Pro	Pro	Gly	Ala	Val
			900					905					910		
Gly	Ser	Pro	Gly	Val	Asn	Gly	Ala	Pro	Gly	Glu	Ala	Gly	Arg	Asp	Gly
		915					920					925			
Asn	Pro	Gly	Asn	Asp	Gly	Pro	Pro	Gly	Arg	Asp	Gly	Gln	Pro	Gly	His
	930					935					940				
Lys	Gly	Glu	Arg	Gly	Tyr	Pro	Gly	Asn	Ile	Gly	Pro	Val	Gly	Ala	Ala
945					950					955					960
Gly	Ala	Pro	Gly	Pro	His	Gly	Pro	Val	Gly	Pro	Ala	Gly	Lys	His	Gly
				965					970					975	
Asn	Arg	Gly	Glu	Thr	Gly	Pro	Ser	Gly	Pro	Val	Gly	Pro	Ala	Gly	Ala
			980					985					990		
Val	Gly	Pro	Arg	Gly	Pro	Ser	Gly	Pro	Gln	Gly	Ile	Arg	Gly	Asp	Lys
		995					1000						1005		

Gly Glu Pro Gly Glu Lys Gly Pro Arg Gly Leu Pro Gly Leu Lys Gly
 1010 1015 1020
 His Asn Gly Leu Gln Gly Leu Pro Gly Ile Ala Gly His His Gly Asp
 1025 1030 1035 1040
 Gln Gly Ala Pro Gly Ser Val Gly Pro Ala Gly Pro Arg Gly Pro Ala
 1045 1050 1055
 Gly Pro Ser Gly Pro Ala Gly Lys Asp Gly Arg Thr Gly His Pro Gly
 1060 1065 1070
 Thr Val Gly Pro Ala Gly Ile Arg Gly Pro Gln Gly His Gln Gly Pro
 1075 1080 1085
 Ala Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Gly Val Ser
 1090 1095 1100
 Gly Gly Gly Tyr Asp Phe Gly Tyr Asp Gly Asp Phe Tyr Arg Ala Asp
 1105 1110 1115 1120
 Gln Pro Arg Ser Ala Pro Ser Leu Arg Pro Lys Asp Tyr Glu Val Asp
 1125 1130 1135
 Ala Thr Leu Lys Ser Leu Asn Asn Gln Ile Glu Thr Leu Leu Thr Pro
 1140 1145 1150
 Glu Gly Ser Arg Lys Asn Pro Ala Arg Thr Cys Arg Asp Leu Arg Leu
 1155 1160 1165
 Ser His Pro Glu Trp Ser Ser Gly Tyr Tyr Trp Ile Asp Pro Asn Gln
 1170 1175 1180
 Gly Cys Thr Met Asp Ala Ile Lys Val Tyr Cys Asp Phe Ser Thr Gly
 1185 1190 1195 1200
 Glu Thr Cys Ile Arg Ala Gln Pro Glu Asn Ile Pro Ala Lys Asn Trp
 1205 1210 1215
 Tyr Arg Ser Ser Lys Asp Lys Lys His Val Trp Leu Gly Glu Thr Ile
 1220 1225 1230
 Asn Ala Gly Ser Gln Phe Glu Tyr Asn Val Glu Gly Val Thr Ser Lys
 1235 1240 1245
 Glu Met Ala Thr Gln Leu Ala Phe Met Arg Leu Leu Ala Asn Tyr Ala
 1250 1255 1260
 Ser Gln Asn Ile Thr Tyr His Cys Lys Asn Ser Ile Ala Tyr Met Asp
 1265 1270 1275 1280
 Glu Glu Thr Gly Asn Leu Lys Lys Ala Val Ile Leu Gln Gly Ser Asn
 1285 1290 1295
 Asp Val Glu Leu Val Ala Glu Gly Asn Ser Arg Phe Thr Tyr Thr Val
 1300 1305 1310
 Leu Val Asp Gly Cys Ser Lys Lys Thr Asn Glu Trp Gly Lys Thr Ile
 1315 1320 1325
 Ile Glu Tyr Lys Thr Asn Lys Pro Ser Arg Leu Pro Phe Leu Asp Ile
 1330 1335 1340
 Ala Pro Leu Asp Ile Gly Gly Ala Asp His Glu Phe Phe Val Asp Ile
 1345 1350 1355 1360
 Gly Pro Val Cys Phe Lys
 1365

<210> 137

<211> 105

<212> PRT

<213> Homo sapiens

<400> 137

Met Ala Lys Ile Ser Ser Pro Thr Glu Thr Glu Arg Cys Ile Glu Ser
 1 5 10 15
 Leu Ile Ala Val Phe Gln Lys Tyr Ala Gly Lys Asp Gly Tyr Asn Tyr

			20					25					30			
Thr	Leu	Ser	Lys	Thr	Glu	Phe	Leu	Ser	Phe	Met	Asn	Thr	Glu	Leu	Ala	
		35					40					45				
Ala	Phe	Thr	Lys	Asn	Gln	Lys	Asp	Pro	Gly	Val	Leu	Asp	Arg	Met	Met	
	50					55					60					
Lys	Lys	Leu	Asp	Thr	Asn	Ser	Asp	Gly	Gln	Leu	Asp	Phe	Ser	Glu	Phe	
65					70					75					80	
Leu	Asn	Leu	Ile	Gly	Gly	Leu	Ala	Met	Ala	Cys	His	Asp	Ser	Phe	Leu	
			85						90					95		
Lys	Ala	Val	Pro	Ser	Gln	Lys	Arg	Thr								
			100					105								

<210> 138
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 138

Met	His	Lys	Glu	Glu	His	Glu	Val	Ala	Val	Leu	Gly	Ala	Pro	Pro	Ser	
1			5					10					15			
Thr	Ile	Leu	Pro	Arg	Ser	Thr	Val	Ile	Asn	Ile	His	Ser	Glu	Thr	Ser	
		20						25				30				
Val	Pro	Asp	His	Val	Val	Trp	Ser	Leu	Phe	Asn	Thr	Leu	Phe	Leu	Asn	
		35					40					45				
Trp	Cys	Cys	Leu	Gly	Phe	Ile	Ala	Phe	Ala	Tyr	Ser	Val	Lys	Ser	Arg	
	50					55					60					
Asp	Arg	Lys	Met	Val	Gly	Asp	Val	Thr	Gly	Ala	Gln	Ala	Tyr	Ala	Ser	
65					70					75					80	
Thr	Ala	Lys	Cys	Leu	Asn	Ile	Trp	Ala	Leu	Ile	Leu	Gly	Ile	Leu	Met	
			85					90						95		
Thr	Ile	Gly	Phe	Ile	Leu	Leu	Leu	Val	Phe	Gly	Ser	Val	Thr	Val	Tyr	
			100					105					110			
His	Ile	Met	Leu	Gln	Ile	Ile	Gln	Glu	Lys	Arg	Gly	Tyr				
		115					120					125				

<210> 139
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 139

Met	Ser	Glu	Ser	Gly	Phe	Lys	Leu	Leu	Cys	Gln	Cys	Leu	Gly	Phe	Gly	
1				5					10					15		
Ser	Gly	His	Phe	Arg	Cys	Asp	Ser	Ser	Arg	Trp	Cys	His	Asp	Asn	Gly	
		20						25					30			
Val	Asn	Tyr	Lys	Ile	Gly	Glu	Lys	Trp	Asp	Arg	Gln	Gly	Glu	Asn	Gly	
		35					40					45				
Gln	Met	Met	Ser	Cys	Thr	Cys	Leu	Gly	Asn	Gly	Lys	Gly	Glu	Phe	Lys	
	50					55					60					
Cys	Asp	Pro	His	Glu	Ala	Thr	Cys	Tyr	Asp	Asp	Gly	Lys	Thr	Tyr	His	
65					70					75					80	
Val	Gly	Glu	Gln	Trp	Gln	Lys	Glu	Tyr	Leu	Gly	Ala	Ile	Cys	Ser	Cys	
			85					90						95		
Thr	Cys	Phe	Gly	Gly	Gln	Arg	Gly	Trp	Arg	Cys	Asp	Asn	Cys	Arg	Arg	
			100					105					110			

Pro	Gly	Gly	Glu	Pro	Ser	Pro	Glu	Gly	Thr	Thr	Gly	Gln	Ser	Tyr	Asn
		115					120					125			
Gln	Tyr	Ser	Gln	Arg	Tyr	His	Gln	Arg	Thr	Asn	Thr	Asn	Val	Asn	Cys
	130					135					140				
Pro	Ile	Glu	Cys	Phe	Met	Pro	Leu	Asp	Val	Gln	Ala	Asp	Arg	Glu	Asp
145					150					155					160
Ser	Arg	Glu													

<210> 140
 <211> 1466
 <212> PRT
 <213> Homo sapiens

Met	Met	Ser	Phe	Val	Gln	Lys	Gly	Ser	Trp	Leu	Leu	Leu	Ala	Leu	Leu
1				5					10					15	
His	Pro	Thr	Ile	Ile	Leu	Ala	Gln	Gln	Glu	Ala	Val	Glu	Gly	Gly	Cys
			20					25					30		
Ser	His	Leu	Gly	Gln	Ser	Tyr	Ala	Asp	Arg	Asp	Val	Trp	Lys	Pro	Glu
		35					40					45			
Pro	Cys	Gln	Ile	Cys	Val	Cys	Asp	Ser	Gly	Ser	Val	Leu	Cys	Asp	Asp
	50					55					60				
Ile	Ile	Cys	Asp	Asp	Gln	Glu	Leu	Asp	Cys	Pro	Asn	Pro	Glu	Ile	Pro
65					70					75					80
Phe	Gly	Glu	Cys	Cys	Ala	Val	Cys	Pro	Gln	Pro	Pro	Thr	Ala	Pro	Thr
				85					90					95	
Arg	Pro	Pro	Asn	Gly	Gln	Gly	Pro	Gln	Gly	Pro	Lys	Gly	Asp	Pro	Gly
			100					105					110		
Pro	Pro	Gly	Ile	Pro	Gly	Arg	Asn	Gly	Asp	Pro	Gly	Ile	Pro	Gly	Gln
		115					120					125			
Pro	Gly	Ser	Pro	Gly	Ser	Pro	Gly	Pro	Pro	Gly	Ile	Cys	Glu	Ser	Cys
	130					135					140				
Pro	Thr	Gly	Pro	Gln	Asn	Tyr	Ser	Pro	Gln	Tyr	Asp	Ser	Tyr	Asp	Val
145					150					155					160
Lys	Ser	Gly	Val	Ala	Val	Gly	Gly	Leu	Ala	Gly	Tyr	Pro	Gly	Pro	Ala
			165					170						175	
Gly	Pro	Pro	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Thr	Ser	Gly	His	Pro	Gly
			180					185					190		
Ser	Pro	Gly	Ser	Pro	Gly	Tyr	Gln	Gly	Pro	Pro	Gly	Glu	Pro	Gly	Gln
		195					200					205			
Ala	Gly	Pro	Ser	Gly	Pro	Pro	Gly	Pro	Pro	Gly	Ala	Ile	Gly	Pro	Ser
	210					215					220				
Gly	Pro	Ala	Gly	Lys	Asp	Gly	Glu	Ser	Gly	Arg	Pro	Gly	Arg	Pro	Gly
225					230					235					240
Glu	Arg	Gly	Leu	Pro	Gly	Pro	Pro	Gly	Ile	Lys	Gly	Pro	Ala	Gly	Ile
			245						250					255	
Pro	Gly	Phe	Pro	Gly	Met	Lys	Gly	His	Arg	Gly	Phe	Asp	Gly	Arg	Asn
		260						265					270		
Gly	Glu	Lys	Gly	Glu	Thr	Gly	Ala	Pro	Gly	Leu	Lys	Gly	Glu	Asn	Gly
		275					280						285		
Leu	Pro	Gly	Glu	Asn	Gly	Ala	Pro	Gly	Pro	Met	Gly	Pro	Arg	Gly	Ala
	290					295					300				
Pro	Gly	Glu	Arg	Gly	Arg	Pro	Gly	Leu	Pro	Gly	Ala	Ala	Gly	Ala	Arg
305					310					315					320
Gly	Asn	Asp	Gly	Ala	Arg	Gly	Ser	Asp	Gly	Gln	Pro	Gly	Pro	Pro	Gly

Pro Gly Leu Pro Gly Ile Ala Gly Pro Arg Gly Ser Pro Gly Glu Arg
 785 790 795 800
 Gly Glu Thr Gly Pro Pro Gly Pro Ala Gly Phe Pro Gly Ala Pro Gly
 805 810 815
 Gln Asn Gly Glu Pro Gly Gly Lys Gly Glu Arg Gly Ala Pro Gly Glu
 820 825 830
 Lys Gly Glu Gly Gly Pro Pro Gly Val Ala Gly Pro Pro Gly Gly Ser
 835 840 845
 Gly Pro Ala Gly Pro Pro Gly Pro Gln Gly Val Lys Gly Glu Arg Gly
 850 855 860
 Ser Pro Gly Gly Pro Gly Ala Ala Gly Phe Pro Gly Ala Arg Gly Leu
 865 870 875 880
 Pro Gly Pro Pro Gly Ser Asn Gly Asn Pro Gly Pro Pro Gly Pro Ser
 885 890 895
 Gly Ser Pro Gly Lys Asp Gly Pro Pro Gly Pro Ala Gly Asn Thr Gly
 900 905 910
 Ala Pro Gly Ser Pro Gly Val Ser Gly Pro Lys Gly Asp Ala Gly Gln
 915 920 925
 Pro Gly Glu Lys Gly Ser Pro Gly Ala Gln Gly Pro Pro Gly Ala Pro
 930 935 940
 Gly Pro Leu Gly Ile Ala Gly Ile Thr Gly Ala Arg Gly Leu Ala Gly
 945 950 955 960
 Pro Pro Gly Met Pro Gly Pro Arg Gly Ser Pro Gly Pro Gln Gly Val
 965 970 975
 Lys Gly Glu Ser Gly Lys Pro Gly Ala Asn Gly Leu Ser Gly Glu Arg
 980 985 990
 Gly Pro Pro Gly Pro Gln Gly Leu Pro Gly Leu Ala Gly Thr Ala Gly
 995 1000 1005
 Glu Pro Gly Arg Asp Gly Asn Pro Gly Ser Asp Gly Leu Pro Gly Arg
 1010 1015 1020
 Asp Gly Ser Pro Gly Gly Lys Gly Asp Arg Gly Glu Asn Gly Ser Pro
 1025 1030 1035 1040
 Gly Ala Pro Gly Ala Pro Gly His Pro Gly Pro Pro Gly Pro Val Gly
 1045 1050 1055
 Pro Ala Gly Lys Ser Gly Asp Arg Gly Glu Ser Gly Pro Ala Gly Pro
 1060 1065 1070
 Ala Gly Ala Pro Gly Pro Ala Gly Ser Arg Gly Ala Pro Gly Pro Gln
 1075 1080 1085
 Gly Pro Arg Gly Asp Lys Gly Glu Thr Gly Glu Arg Gly Ala Ala Gly
 1090 1095 1100
 Ile Lys Gly His Arg Gly Phe Pro Gly Asn Pro Gly Ala Pro Gly Ser
 1105 1110 1115 1120
 Pro Gly Pro Ala Gly Gln Gln Gly Ala Ile Gly Ser Pro Gly Pro Ala
 1125 1130 1135
 Gly Pro Arg Gly Pro Val Gly Pro Ser Gly Pro Pro Gly Lys Asp Gly
 1140 1145 1150
 Thr Ser Gly His Pro Gly Pro Ile Gly Pro Pro Gly Pro Arg Gly Asn
 1155 1160 1165
 Arg Gly Glu Arg Gly Ser Glu Gly Ser Pro Gly His Pro Gly Gln Pro
 1170 1175 1180
 Gly Pro Pro Gly Pro Pro Gly Ala Pro Gly Pro Cys Cys Gly Gly Val
 1185 1190 1195 1200
 Gly Ala Ala Ala Ile Ala Gly Ile Gly Gly Glu Lys Ala Gly Gly Phe
 1205 1210 1215
 Ala Pro Tyr Tyr Gly Asp Glu Pro Met Asp Phe Lys Ile Asn Thr Asp
 1220 1225 1230
 Glu Ile Met Thr Ser Leu Lys Ser Val Asn Gly Gln Ile Glu Ser Leu

Asn Leu Ala Ala Arg Asp Phe Ile Asn Trp Leu Ile Gln Thr Lys Ile
165 170 175
Thr Asp Arg Lys
180

<210> 142
<211> 1064
<212> PRT
<213> Homo sapiens

<400> 142
Met Lys Ile Ala Thr Val Ser Val Leu Leu Pro Leu Ala Leu Cys Leu
1 5 10 15
Ile Gln Asp Ala Ala Ser Lys Asn Glu Asp Gln Glu Met Cys His Glu
20 25 30
Phe Gln Ala Phe Met Lys Asn Gly Lys Leu Phe Cys Pro Gln Asp Lys
35 40 45
Lys Phe Phe Gln Ser Leu Asp Gly Ile Met Phe Ile Asn Lys Cys Ala
50 55 60
Thr Cys Lys Met Ile Leu Glu Lys Glu Ala Lys Ser Gln Lys Arg Ala
65 70 75 80
Arg His Leu Ala Arg Ala Pro Lys Ala Thr Ala Pro Thr Glu Leu Asn
85 90 95
Cys Asp Asp Phe Lys Lys Gly Glu Arg Asp Gly Asp Phe Ile Cys Pro
100 105 110
Asp Tyr Tyr Glu Ala Val Cys Gly Thr Asp Gly Lys Thr Tyr Asp Asn
115 120 125
Arg Cys Ala Leu Cys Ala Glu Asn Ala Lys Thr Gly Ser Gln Ile Gly
130 135 140
Val Lys Ser Glu Gly Glu Cys Lys Ser Ser Asn Pro Glu Gln Asp Val
145 150 155 160
Cys Ser Ala Phe Arg Pro Phe Val Arg Asp Gly Arg Leu Gly Cys Thr
165 170 175
Arg Glu Asn Asp Pro Val Leu Gly Pro Asp Gly Lys Thr His Gly Asn
180 185 190
Lys Cys Ala Met Cys Ala Glu Leu Phe Leu Lys Glu Ala Glu Asn Ala
195 200 205
Lys Arg Glu Gly Glu Thr Arg Ile Arg Arg Asn Ala Glu Lys Asp Phe
210 215 220
Cys Lys Glu Tyr Glu Lys Gln Val Arg Asn Gly Arg Leu Phe Cys Thr
225 230 235 240
Arg Glu Ser Asp Pro Val Arg Gly Pro Asp Gly Arg Met His Gly Asn
245 250 255
Lys Cys Ala Leu Cys Ala Glu Ile Phe Lys Arg Arg Phe Ser Glu Glu
260 265 270
Asn Ser Lys Thr Asp Gln Asn Leu Gly Lys Ala Glu Glu Lys Thr Lys
275 280 285
Val Lys Arg Glu Ile Val Lys Leu Cys Ser Gln Tyr Gln Asn Gln Ala
290 295 300
Lys Asn Gly Ile Leu Phe Cys Thr Arg Glu Asn Asp Pro Ile Arg Gly
305 310 315 320
Pro Asp Gly Lys Met His Gly Asn Leu Cys Ser Met Cys Gln Val Tyr
325 330 335
Phe Gln Ala Glu Asn Glu Glu Lys Lys Lys Ala Glu Ala Arg Ala Arg
340 345 350
Asn Lys Arg Glu Ser Gly Lys Ala Thr Ser Tyr Ala Glu Leu Cys Asn

Glu	Ala	Ala	Glu	Lys	Lys	Lys	Lys	Glu	Asp	Glu	Asp	Arg	Ser	Asn	Thr		
			820					825						830			
Gly	Glu	Arg	Ser	Asn	Thr	Gly	Glu	Arg	Ser	Asn	Asp	Lys	Glu	Asp	Leu		
		835					840					845					
Cys	Arg	Glu	Phe	Arg	Ser	Met	Gln	Arg	Asn	Gly	Lys	Leu	Ile	Cys	Thr		
	850					855					860						
Arg	Glu	Asn	Asn	Pro	Val	Arg	Gly	Pro	Tyr	Gly	Lys	Met	His	Ile	Asn		
865					870					875					880		
Lys	Cys	Ala	Met	Cys	Gln	Ser	Ile	Phe	Asp	Arg	Glu	Ala	Asn	Glu	Arg		
			885						890					895			
Lys	Lys	Lys	Asp	Glu	Glu	Lys	Ser	Ser	Ser	Lys	Pro	Ser	Asn	Asn	Ala		
			900					905					910				
Lys	Asp	Glu	Cys	Ser	Glu	Phe	Arg	Asn	Tyr	Ile	Arg	Asn	Asn	Glu	Leu		
	915						920					925					
Ile	Cys	Pro	Arg	Glu	Asn	Asp	Pro	Val	His	Gly	Ala	Asp	Gly	Lys	Phe		
	930					935					940						
Tyr	Thr	Asn	Lys	Cys	Tyr	Met	Cys	Arg	Ala	Val	Phe	Leu	Thr	Glu	Ala		
945					950					955					960		
Leu	Glu	Arg	Ala	Lys	Leu	Gln	Glu	Lys	Pro	Ser	His	Val	Arg	Ala	Ser		
			965						970					975			
Gln	Glu	Glu	Asp	Ser	Pro	Asp	Ser	Phe	Ser	Ser	Leu	Asp	Ser	Glu	Met		
			980					985					990				
Cys	Lys	Asp	Tyr	Arg	Val	Leu	Pro	Arg	Ile	Gly	Tyr	Leu	Cys	Pro	Lys		
	995						1000					1005					
Asp	Leu	Lys	Pro	Val	Cys	Gly	Asp	Asp	Gly	Gln	Thr	Tyr	Asn	Asn	Pro		
	1010					1015					1020						
Cys	Met	Leu	Cys	His	Glu	Asn	Leu	Ile	Arg	Gln	Thr	Asn	Thr	His	Ile		
1025					1030					1035					1040		
Arg	Ser	Thr	Gly	Lys	Cys	Glu	Glu	Ser	Ser	Thr	Pro	Gly	Thr	Thr	Ala		
			1045						1050					1055			
Ala	Ser	Met	Pro	Pro	Ser	Asp	Glu										
			1060														

<210> 143
 <211> 967
 <212> PRT
 <213> Homo sapiens

<400> 143

Met	Ala	Lys	Gly	Phe	Tyr	Ile	Ser	Lys	Ser	Leu	Gly	Ile	Leu	Gly	Ile		
1				5					10					15			
Leu	Leu	Gly	Val	Ala	Ala	Val	Cys	Thr	Ile	Ile	Ala	Leu	Ser	Val	Val		
			20					25					30				
Tyr	Ser	Gln	Glu	Lys	Asn	Lys	Asn	Ala	Asn	Ser	Ser	Pro	Val	Ala	Ser		
		35					40					45					
Thr	Thr	Pro	Ser	Ala	Ser	Ala	Thr	Thr	Asn	Pro	Ala	Ser	Ala	Thr	Thr		
		50				55					60						
Leu	Asp	Gln	Ser	Lys	Ala	Trp	Asn	Arg	Tyr	Arg	Leu	Pro	Asn	Thr	Leu		
65					70				75					80			
Lys	Pro	Asp	Ser	Tyr	Gln	Val	Thr	Leu	Arg	Pro	Tyr	Leu	Thr	Pro	Asn		
			85						90					95			
Asp	Arg	Gly	Leu	Tyr	Val	Phe	Lys	Gly	Ser	Ser	Thr	Val	Arg	Phe	Thr		
		100						105					110				
Cys	Lys	Glu	Ala	Thr	Asp	Val	Ile	Ile	Ile	His	Ser	Lys	Lys	Leu	Asn		
		115					120					125					
Tyr	Thr	Leu	Ser	Gln	Gly	His	Arg	Val	Val	Leu	Arg	Gly	Val	Gly	Gly		

130		135		140
Ser Gln Pro Pro Asp Ile	Asp Lys Thr Glu Leu Val Glu Pro Thr Glu			
145		150		155
Tyr Leu Val Val His Leu Lys Gly Ser Leu Val Lys Asp Ser Gln Tyr				160
		165		170
Glu Met Asp Ser Glu Phe Glu Gly Glu Leu Ala Asp Asp Leu Ala Gly				175
		180		185
Phe Tyr Arg Ser Glu Tyr Met Glu Gly Asn Val Arg Lys Val Val Ala				190
		195		200
Thr Thr Gln Met Gln Ala Ala Asp Ala Arg Lys Ser Phe Pro Cys Phe				205
		210		215
Asp Glu Pro Ala Met Lys Ala Glu Phe Asn Ile Thr Leu Ile His Pro				220
225		230		235
Lys Asp Leu Thr Ala Leu Ser Asn Met Leu Pro Lys Gly Pro Ser Thr				240
		245		250
Pro Leu Pro Glu Asp Pro Asn Trp Asn Val Thr Glu Phe His Thr Thr				255
		260		265
Pro Lys Met Ser Thr Tyr Leu Leu Ala Phe Ile Val Ser Glu Phe Asp				270
		275		280
Tyr Val Glu Lys Gln Ala Ser Asn Gly Val Leu Ile Arg Ile Trp Ala				285
290		295		300
Arg Pro Ser Ala Ile Ala Ala Gly His Gly Asp Tyr Ala Leu Asn Val				305
		310		315
Thr Gly Pro Ile Leu Asn Phe Phe Ala Gly His Tyr Asp Thr Pro Tyr				320
		325		330
Pro Leu Pro Lys Ser Asp Gln Ile Gly Leu Pro Asp Phe Asn Ala Gly				335
		340		345
Ala Met Glu Asn Trp Gly Leu Val Thr Tyr Arg Glu Asn Ser Leu Leu				350
		355		360
Phe Asp Pro Leu Ser Ser Ser Ser Ser Asn Lys Glu Arg Val Val Thr				365
		370		375
Val Ile Ala His Glu Leu Ala His Gln Trp Phe Gly Asn Leu Val Thr				380
385		390		395
Ile Glu Trp Trp Asn Asp Leu Trp Leu Asn Glu Gly Phe Ala Ser Tyr				400
		405		410
Val Glu Tyr Leu Gly Ala Asp Tyr Ala Glu Pro Thr Trp Asn Leu Lys				415
		420		425
Asp Leu Met Val Leu Asn Asp Val Tyr Arg Val Met Ala Val Asp Ala				430
		435		440
Leu Ala Ser Ser His Pro Leu Ser Thr Pro Ala Ser Glu Ile Asn Thr				445
450		455		460
Pro Ala Gln Ile Ser Glu Leu Phe Asp Ala Ile Ser Tyr Ser Lys Gly				465
		470		475
Ala Ser Val Leu Arg Met Leu Ser Ser Phe Leu Ser Glu Asp Val Phe				480
		485		490
Lys Gln Gly Leu Ala Ser Tyr Leu His Thr Phe Ala Tyr Gln Asn Thr				495
		500		505
Ile Tyr Leu Asn Leu Trp Asp His Leu Gln Glu Ala Val Asn Asn Arg				510
		515		520
Ser Ile Gln Leu Pro Thr Thr Val Arg Asp Ile Met Asn Arg Trp Thr				525
		530		535
Leu Gln Met Gly Phe Pro Val Ile Thr Val Asp Thr Ser Thr Gly Thr				540
545		550		555
Leu Ser Gln Glu His Phe Leu Leu Asp Pro Asp Ser Asn Val Thr Arg				560
		565		570
Pro Ser Glu Phe Asn Tyr Val Trp Ile Val Pro Ile Thr Ser Ile Arg				575
		580		585
				590

Asp Gly Arg Gln Gln Gln Asp Tyr Trp Leu Ile Asp Val Arg Ala Gln
 595 600 605
 Asn Asp Leu Phe Ser Thr Ser Gly Asn Glu Trp Val Leu Leu Asn Leu
 610 615 620
 Asn Val Thr Gly Tyr Tyr Arg Val Asn Tyr Asp Glu Glu Asn Trp Arg
 625 630 635 640
 Lys Ile Gln Thr Gln Leu Gln Arg Asp His Ser Ala Ile Pro Val Ile
 645 650 655
 Asn Arg Ala Gln Ile Ile Asn Asp Ala Phe Asn Leu Ala Ser Ala His
 660 665 670
 Lys Val Pro Val Thr Leu Ala Leu Asn Asn Thr Leu Phe Leu Ile Glu
 675 680 685
 Glu Arg Gln Tyr Met Pro Trp Glu Ala Ala Leu Ser Ser Leu Ser Tyr
 690 695 700
 Phe Lys Leu Met Phe Asp Arg Ser Glu Val Tyr Gly Pro Met Lys Asn
 705 710 715 720
 Tyr Leu Lys Lys Gln Val Thr Pro Leu Phe Ile His Phe Arg Asn Asn
 725 730 735
 Thr Asn Asn Trp Arg Glu Ile Pro Glu Asn Leu Met Asp Gln Tyr Ser
 740 745 750
 Glu Val Asn Ala Ile Ser Thr Ala Cys Ser Asn Gly Val Pro Glu Cys
 755 760 765
 Glu Glu Met Val Ser Gly Leu Phe Lys Gln Trp Met Glu Asn Pro Asn
 770 775 780
 Asn Asn Pro Ile His Pro Asn Leu Arg Ser Thr Val Tyr Cys Asn Ala
 785 790 795 800
 Ile Ala Gln Gly Gly Glu Glu Glu Trp Asp Phe Ala Trp Glu Gln Phe
 805 810 815
 Arg Asn Ala Thr Leu Val Asn Glu Ala Asp Lys Leu Arg Ala Ala Leu
 820 825 830
 Ala Cys Ser Lys Glu Leu Trp Ile Leu Asn Arg Tyr Leu Ser Tyr Thr
 835 840 845
 Leu Asn Pro Asp Leu Ile Arg Lys Gln Asp Ala Thr Ser Thr Ile Ile
 850 855 860
 Ser Ile Thr Asn Asn Val Ile Gly Gln Gly Leu Val Trp Asp Phe Val
 865 870 875 880
 Gln Ser Asn Trp Lys Lys Leu Phe Asn Asp Tyr Gly Gly Gly Ser Phe
 885 890 895
 Ser Phe Ser Asn Leu Ile Gln Ala Val Thr Arg Arg Phe Ser Thr Glu
 900 905 910
 Tyr Glu Leu Gln Gln Leu Glu Gln Phe Lys Lys Asp Asn Glu Glu Thr
 915 920 925
 Gly Phe Gly Ser Gly Thr Arg Ala Leu Glu Gln Ala Leu Glu Lys Thr
 930 935 940
 Lys Ala Asn Ile Lys Trp Val Lys Glu Asn Lys Glu Val Val Leu Gln
 945 950 955 960
 Trp Phe Thr Glu Asn Ser Lys
 965

<210> 144

<211> 261

<212> PRT

<213> Homo sapiens

<400> 144

Met Ser Gly Glu Ile Ala Met Cys Glu Pro Glu Phe Gly Asn Asp Lys

1				5				10					15			
Ala	Arg	Glu	Pro	Ser	Val	Gly	Gly	Arg	Trp	Arg	Val	Ser	Trp	Tyr	Glu	
			20					25					30			
Arg	Phe	Val	Gln	Pro	Cys	Leu	Val	Glu	Leu	Leu	Gly	Ser	Ala	Leu	Phe	
		35					40					45				
Ile	Phe	Ile	Gly	Cys	Leu	Ser	Val	Ile	Glu	Asn	Gly	Thr	Asp	Thr	Gly	
	50					55					60					
Leu	Leu	Gln	Pro	Ala	Leu	Ala	His	Gly	Leu	Ala	Leu	Gly	Leu	Val	Ile	
65					70					75					80	
Ala	Thr	Leu	Gly	Asn	Ile	Ser	Gly	Gly	His	Phe	Asn	Pro	Ala	Val	Ser	
				85					90					95		
Leu	Ala	Ala	Met	Leu	Ile	Gly	Gly	Leu	Asn	Leu	Val	Met	Leu	Leu	Pro	
			100					105					110			
Tyr	Trp	Val	Ser	Gln	Leu	Leu	Gly	Gly	Met	Leu	Gly	Ala	Ala	Leu	Ala	
		115					120					125				
Lys	Val	Val	Ser	Pro	Glu	Glu	Arg	Phe	Trp	Asn	Ala	Ser	Gly	Ala	Ala	
	130					135					140					
Phe	Val	Thr	Val	Gln	Glu	Gln	Gly	Gln	Val	Ala	Gly	Ala	Leu	Val	Ala	
145					150					155					160	
Glu	Ile	Ile	Leu	Thr	Thr	Leu	Leu	Ala	Leu	Ala	Val	Cys	Met	Gly	Ala	
				165					170					175		
Ile	Asn	Glu	Lys	Thr	Lys	Gly	Pro	Leu	Ala	Pro	Phe	Ser	Ile	Gly	Phe	
		180						185					190			
Ala	Val	Thr	Val	Asp	Ile	Leu	Ala	Gly	Gly	Pro	Val	Ser	Gly	Gly	Cys	
		195					200					205				
Met	Asn	Pro	Ala	Arg	Ala	Phe	Gly	Pro	Ala	Val	Val	Ala	Asn	His	Trp	
	210					215					220					
Asn	Phe	His	Trp	Ile	Tyr	Trp	Leu	Gly	Pro	Leu	Leu	Ala	Gly	Leu	Leu	
225					230					235					240	
Val	Gly	Leu	Leu	Ile	Arg	Cys	Phe	Ile	Gly	Asp	Gly	Lys	Thr	Arg	Leu	
				245					250					255		
Ile	Leu	Lys	Ala	Arg												
			260													

<210> 145
 <211> 112
 <212> PRT
 <213> Homo sapiens

<400> 145																
Met	Gly	Cys	Arg	Ala	Ala	Ser	Gly	Leu	Leu	Pro	Gly	Val	Ala	Val	Val	
1				5				10					15			
Leu	Leu	Leu	Leu	Leu	Gln	Ser	Thr	Gln	Ser	Val	Tyr	Ile	Gln	Tyr	Gln	
			20					25					30			
Gly	Phe	Arg	Val	Gln	Leu	Glu	Ser	Met	Lys	Lys	Leu	Ser	Asp	Leu	Glu	
		35					40					45				
Ala	Gln	Trp	Ala	Pro	Ser	Pro	Arg	Leu	Gln	Ala	Gln	Ser	Leu	Leu	Pro	
	50					55					60					
Ala	Val	Cys	His	His	Pro	Ala	Leu	Pro	Gln	Asp	Leu	Gln	Pro	Val	Cys	
65					70					75					80	
Ala	Ser	Gln	Glu	Ala	Ser	Ser	Ile	Phe	Lys	Thr	Leu	Arg	Thr	Ile	Ala	
				85					90					95		
Asn	Asp	Asp	Cys	Glu	Leu	Cys	Val	Asn	Val	Ala	Cys	Thr	Gly	Cys	Leu	
			100					105					110			

<210> 146
 <211> 917
 <212> PRT
 <213> Homo sapiens

<400> 146
 Met Gly Leu Phe Arg Gly Phe Val Phe Leu Leu Val Leu Cys Leu Leu
 1 5 10 15
 His Gln Ser Asn Thr Ser Phe Ile Lys Leu Asn Asn Asn Gly Phe Glu
 20 25 30
 Asp Ile Val Ile Val Ile Asp Pro Ser Val Pro Glu Asp Glu Lys Ile
 35 40 45
 Ile Glu Gln Ile Glu Asp Met Val Thr Thr Ala Ser Thr Tyr Leu Phe
 50 55 60
 Glu Ala Thr Glu Lys Arg Phe Phe Phe Lys Asn Val Ser Ile Leu Ile
 65 70 75 80
 Pro Glu Asn Trp Lys Glu Asn Pro Gln Tyr Lys Arg Pro Lys His Glu
 85 90 95
 Asn His Lys His Ala Asp Val Ile Val Ala Pro Pro Thr Leu Pro Gly
 100 105 110
 Arg Asp Glu Pro Tyr Thr Lys Gln Phe Thr Glu Cys Gly Glu Lys Gly
 115 120 125
 Glu Tyr Ile His Phe Thr Pro Asp Leu Leu Leu Gly Lys Lys Gln Asn
 130 135 140
 Glu Tyr Gly Pro Pro Gly Lys Leu Phe Val His Glu Trp Ala His Leu
 145 150 155 160
 Arg Trp Gly Val Phe Asp Glu Tyr Asn Glu Asp Gln Pro Phe Tyr Arg
 165 170 175
 Ala Lys Ser Lys Lys Ile Glu Ala Thr Arg Cys Ser Ala Gly Ile Ser
 180 185 190
 Gly Arg Asn Arg Val Tyr Lys Cys Gln Gly Gly Ser Cys Leu Ser Arg
 195 200 205
 Ala Cys Arg Ile Asp Ser Thr Thr Lys Leu Tyr Gly Lys Asp Cys Gln
 210 215 220
 Phe Phe Pro Asp Lys Val Gln Thr Glu Lys Ala Ser Ile Met Phe Met
 225 230 235 240
 Gln Ser Ile Asp Ser Val Val Glu Phe Cys Asn Glu Lys Thr His Asn
 245 250 255
 Gln Glu Ala Pro Ser Leu Gln Asn Ile Lys Cys Asn Phe Arg Ser Thr
 260 265 270
 Trp Glu Val Ile Ser Asn Ser Glu Asp Phe Lys Asn Thr Ile Pro Met
 275 280 285
 Val Thr Pro Pro Pro Pro Val Phe Ser Leu Leu Lys Ile Arg Gln
 290 295 300
 Arg Ile Val Cys Leu Val Leu Asp Lys Ser Gly Ser Met Gly Gly Lys
 305 310 315 320
 Asp Arg Leu Asn Arg Met Asn Gln Ala Ala Lys His Phe Leu Leu Gln
 325 330 335
 Thr Val Glu Asn Gly Ser Trp Val Gly Met Val His Phe Asp Ser Thr
 340 345 350
 Ala Thr Ile Val Asn Lys Leu Ile Gln Ile Lys Ser Ser Asp Glu Arg
 355 360 365
 Asn Thr Leu Met Ala Gly Leu Pro Thr Tyr Pro Leu Gly Gly Thr Ser
 370 375 380
 Ile Cys Ser Gly Ile Lys Tyr Ala Phe Gln Val Ile Gly Glu Leu His
 385 390 395 400
 Ser Gln Leu Asp Gly Ser Glu Val Leu Leu Leu Thr Asp Gly Glu Asp

Leu	Phe	Ile	Pro	Gln	Ala	Asn	Pro	Asp	Asp	Ile	Asp	Pro	Thr	Pro	Thr
865					870					875					880
Pro	Thr	Pro	Thr	Pro	Asp	Lys	Ser	His	Asn	Ser	Gly	Val	Asn	Ile	Ser
				885					890					895	
Thr	Leu	Val	Leu	Ser	Val	Ile	Gly	Ser	Val	Val	Ile	Val	Asn	Phe	Ile
			900					905					910		
Leu	Ser	Thr	Thr	Ile											
			915												

<210> 147

<211> 437

<212> PRT

<213> Homo sapiens

<400> 147

Met	Ser	Ala	Val	Leu	Leu	Leu	Ala	Leu	Leu	Gly	Phe	Ile	Leu	Pro	Leu
1				5					10					15	
Pro	Gly	Val	Gln	Ala	Leu	Leu	Cys	Gln	Phe	Gly	Thr	Val	Gln	His	Val
			20					25					30		
Trp	Lys	Val	Ser	Asp	Leu	Pro	Arg	Gln	Trp	Thr	Pro	Lys	Asn	Thr	Ser
		35					40					45			
Cys	Asp	Ser	Gly	Leu	Gly	Cys	Gln	Asp	Thr	Leu	Met	Leu	Ile	Glu	Ser
	50					55					60				
Gly	Pro	Gln	Val	Ser	Leu	Val	Leu	Ser	Lys	Gly	Cys	Thr	Glu	Ala	Lys
65					70					75					80
Asp	Gln	Glu	Pro	Arg	Val	Thr	Glu	His	Arg	Met	Gly	Pro	Gly	Leu	Ser
				85					90					95	
Leu	Ile	Ser	Tyr	Thr	Phe	Val	Cys	Arg	Gln	Glu	Asp	Phe	Cys	Asn	Asn
			100					105					110		
Leu	Val	Asn	Ser	Leu	Pro	Leu	Trp	Ala	Pro	Gln	Pro	Pro	Ala	Asp	Pro
		115					120					125			
Gly	Ser	Leu	Arg	Cys	Pro	Val	Cys	Leu	Ser	Met	Glu	Gly	Cys	Leu	Glu
	130					135					140				
Gly	Thr	Thr	Glu	Glu	Ile	Cys	Pro	Lys	Gly	Thr	Thr	His	Cys	Tyr	Asp
145					150					155					160
Gly	Leu	Leu	Arg	Leu	Arg	Gly	Gly	Gly	Ile	Phe	Ser	Asn	Leu	Arg	Val
				165					170					175	
Gln	Gly	Cys	Met	Pro	Gln	Pro	Gly	Cys	Asn	Leu	Leu	Asn	Gly	Thr	Gln
			180					185					190		
Glu	Ile	Gly	Pro	Val	Gly	Met	Thr	Glu	Asn	Cys	Asn	Arg	Lys	Asp	Phe
		195					200					205			
Leu	Thr	Cys	His	Arg	Gly	Thr	Thr	Ile	Met	Thr	His	Gly	Asn	Leu	Ala
	210					215					220				
Gln	Glu	Pro	Thr	Asp	Trp	Thr	Thr	Ser	Asn	Thr	Glu	Met	Cys	Glu	Val
225					230					235					240
Gly	Gln	Val	Cys	Gln	Glu	Thr	Leu	Leu	Leu	Ile	Asp	Val	Gly	Leu	Thr
				245					250					255	
Ser	Thr	Leu	Val	Gly	Thr	Lys	Gly	Cys	Ser	Thr	Val	Gly	Ala	Gln	Asn
			260					265					270		
Ser	Gln	Lys	Thr	Thr	Ile	His	Ser	Ala	Pro	Pro	Gly	Val	Leu	Val	Ala
		275					280					285			
Ser	Tyr	Thr	His	Phe	Cys	Ser	Ser	Asp	Leu	Cys	Asn	Ser	Ala	Ser	Ser
	290					295					300				
Ser	Ser	Val	Leu	Leu	Asn	Ser	Leu	Pro	Pro	Gln	Ala	Ala	Pro	Val	Pro
305					310					315					320
Gly	Asp	Arg	Gln	Cys	Pro	Thr	Cys	Val	Gln	Pro	Leu	Gly	Thr	Cys	Ser

				325					330					335			
Ser	Gly	Ser	Pro	Arg	Met	Thr	Cys	Pro	Arg	Gly	Ala	Thr	His	Cys	Tyr		
			340					345					350				
Asp	Gly	Tyr	Ile	His	Leu	Ser	Gly	Gly	Gly	Leu	Ser	Thr	Lys	Met	Ser		
		355					360					365					
Ile	Gln	Gly	Cys	Val	Ala	Gln	Pro	Ser	Ser	Phe	Leu	Leu	Asn	His	Thr		
	370					375					380						
Arg	Gln	Ile	Gly	Ile	Phe	Ser	Ala	Arg	Glu	Lys	Arg	Asp	Val	Gln	Pro		
385					390				395						400		
Pro	Ala	Ser	Gln	His	Glu	Gly	Gly	Gly	Ala	Glu	Gly	Leu	Glu	Ser	Leu		
			405					410						415			
Thr	Trp	Gly	Val	Gly	Leu	Ala	Leu	Ala	Pro	Ala	Leu	Trp	Trp	Gly	Val		
		420					425					430					
Val	Cys	Pro	Ser	Cys													
		435															

<210> 148
 <211> 452
 <212> PRT
 <213> Homo sapiens

<400> 148																	
Met	Leu	Cys	Gly	Arg	Pro	Arg	Ser	Ser	Ser	Asp	Asn	Arg	Asn	Phe	Leu		
1				5					10					15			
Arg	Glu	Arg	Ala	Gly	Leu	Ser	Ser	Ala	Ala	Val	Gln	Thr	Arg	Ile	Gly		
			20					25				30					
Asn	Ser	Ala	Ala	Ser	Arg	Arg	Ser	Pro	Ala	Ala	Arg	Pro	Pro	Val	Pro		
		35					40				45						
Ala	Pro	Pro	Ala	Leu	Pro	Arg	Gly	Arg	Pro	Gly	Thr	Glu	Gly	Ser	Thr		
	50					55				60							
Ser	Leu	Ser	Ala	Pro	Ala	Val	Leu	Val	Val	Ala	Val	Ala	Val	Val	Val		
65				70					75						80		
Val	Val	Val	Ser	Ala	Val	Ala	Trp	Ala	Met	Ala	Asn	Tyr	Ile	His	Val		
			85					90					95				
Pro	Pro	Gly	Ser	Pro	Glu	Val	Pro	Lys	Leu	Asn	Val	Thr	Val	Gln	Asp		
		100					105				110						
Gln	Glu	Glu	His	Arg	Cys	Arg	Glu	Gly	Ala	Leu	Ser	Leu	Leu	Gln	His		
	115					120					125						
Leu	Arg	Pro	His	Trp	Asp	Pro	Gln	Glu	Val	Thr	Leu	Gln	Leu	Phe	Thr		
	130				135					140							
Asp	Gly	Ile	Thr	Asn	Lys	Leu	Ile	Gly	Cys	Tyr	Val	Gly	Asn	Thr	Met		
145				150					155						160		
Glu	Asp	Val	Val	Leu	Val	Arg	Ile	Tyr	Gly	Asn	Lys	Thr	Glu	Leu	Leu		
			165					170					175				
Val	Asp	Arg	Asp	Glu	Glu	Val	Lys	Ser	Phe	Arg	Val	Leu	Gln	Ala	His		
		180					185					190					
Gly	Cys	Ala	Pro	Gln	Leu	Tyr	Cys	Thr	Phe	Asn	Asn	Gly	Leu	Cys	Tyr		
	195					200					205						
Glu	Phe	Ile	Gln	Gly	Glu	Ala	Leu	Asp	Pro	Lys	His	Val	Cys	Asn	Pro		
	210				215					220							
Ala	Ile	Phe	Arg	Leu	Ile	Ala	Arg	Gln	Leu	Ala	Lys	Ile	His	Ala	Ile		
225				230					235						240		
His	Ala	His	Asn	Gly	Trp	Ile	Pro	Lys	Ser	Asn	Leu	Trp	Leu	Lys	Met		
		245					250					255					
Gly	Lys	Tyr	Phe	Ser	Leu	Ile	Pro	Thr	Gly	Phe	Ala	Asp	Glu	Asp	Ile		
		260					265					270					

Asn	Lys	Arg	Phe	Leu	Ser	Asp	Ile	Pro	Ser	Ser	Gln	Ile	Leu	Gln	Glu
		275					280				285				
Glu	Met	Thr	Trp	Met	Lys	Glu	Ile	Leu	Ser	Asn	Leu	Gly	Ser	Pro	Val
	290					295				300					
Val	Leu	Cys	His	Asn	Asp	Leu	Leu	Cys	Lys	Asn	Ile	Ile	Tyr	Asn	Glu
305				310						315				320	
Lys	Gln	Gly	Asp	Val	Gln	Phe	Ile	Asp	Tyr	Glu	Tyr	Ser	Gly	Tyr	Asn
			325					330					335		
Tyr	Leu	Ala	Tyr	Asp	Ile	Gly	Asn	His	Phe	Asn	Glu	Phe	Ala	Gly	Val
		340					345					350			
Ser	Asp	Val	Asp	Tyr	Ser	Leu	Tyr	Pro	Asp	Arg	Glu	Leu	Gln	Ser	Gln
		355				360					365				
Trp	Leu	Arg	Ala	Tyr	Leu	Glu	Ala	Tyr	Lys	Glu	Phe	Lys	Gly	Phe	Gly
	370					375				380					
Thr	Glu	Val	Thr	Glu	Lys	Glu	Val	Glu	Ile	Leu	Phe	Ile	Gln	Val	Asn
385				390					395					400	
Gln	Phe	Ala	Leu	Ala	Ser	His	Phe	Phe	Trp	Gly	Leu	Trp	Ala	Leu	Ile
			405				410						415		
Gln	Ala	Lys	Tyr	Ser	Thr	Ile	Glu	Phe	Asp	Phe	Leu	Gly	Tyr	Ala	Ile
		420				425				430					
Val	Arg	Phe	Asn	Gln	Tyr	Phe	Lys	Met	Lys	Pro	Glu	Val	Thr	Ala	Leu
	435					440					445				
Lys	Val	Pro	Glu												
	450														

<210> 149

<211> 192

<212> PRT

<213> Homo sapiens

<400> 149

Met	Gly	Ser	Leu	Gly	Ser	Lys	Asn	Pro	Gln	Thr	Lys	Gln	Ala	Gln	Val
1			5					10					15		
Leu	Leu	Leu	Gly	Leu	Asp	Ser	Ala	Gly	Lys	Ser	Thr	Leu	Leu	Tyr	Lys
		20				25					30				
Leu	Lys	Leu	Ala	Lys	Asp	Ile	Thr	Thr	Ile	Pro	Thr	Ile	Gly	Phe	Asn
	35				40				45						
Val	Glu	Met	Ile	Glu	Leu	Glu	Arg	Asn	Leu	Ser	Leu	Thr	Val	Trp	Asp
	50				55			60							
Val	Gly	Gly	Gln	Glu	Lys	Met	Arg	Thr	Val	Trp	Gly	Cys	Tyr	Cys	Glu
65				70				75					80		
Asn	Thr	Asp	Gly	Leu	Val	Tyr	Val	Val	Asp	Ser	Thr	Asp	Lys	Gln	Arg
		85					90					95			
Leu	Glu	Glu	Ser	Gln	Arg	Gln	Phe	Glu	His	Ile	Leu	Lys	Asn	Glu	His
		100				105						110			
Ile	Lys	Asn	Val	Pro	Val	Val	Leu	Leu	Ala	Asn	Lys	Gln	Asp	Met	Pro
	115					120					125				
Gly	Ala	Leu	Thr	Ala	Glu	Asp	Ile	Thr	Arg	Met	Phe	Lys	Val	Lys	Lys
	130				135			140							
Leu	Cys	Ser	Asp	Arg	Asn	Trp	Tyr	Val	Gln	Pro	Cys	Cys	Ala	Leu	Thr
145				150				155					160		
Gly	Glu	Gly	Leu	Ala	Gln	Gly	Phe	Arg	Lys	Leu	Thr	Gly	Phe	Val	Lys
			165				170					175			
Ser	His	Met	Lys	Ser	Arg	Gly	Asp	Thr	Leu	Ala	Phe	Phe	Lys	Gln	Asn
		180					185					190			

<210> 150
 <211> 530
 <212> PRT
 <213> Homo sapiens

<400> 150
 Met Ser Leu Lys Trp Thr Ser Val Phe Leu Leu Ile Gln Leu Ser Cys
 1 5 10 15
 Tyr Phe Ser Ser Gly Ser Cys Gly Lys Val Leu Val Trp Pro Thr Glu
 20 25 30
 Tyr Ser His Trp Ile Asn Met Lys Thr Ile Leu Glu Glu Leu Val Gln
 35 40 45
 Arg Gly His Glu Val Thr Val Leu Thr Ser Ser Ala Ser Thr Leu Val
 50 55 60
 Asn Ala Ser Lys Ser Ser Ala Ile Lys Leu Glu Val Tyr Pro Thr Ser
 65 70 75 80
 Leu Thr Lys Asn Asp Leu Glu Asp Ser Leu Leu Lys Ile Leu Asp Arg
 85 90 95
 Trp Ile Tyr Gly Val Ser Lys Asn Thr Phe Trp Ser Tyr Phe Ser Gln
 100 105 110
 Leu Gln Glu Leu Cys Trp Glu Tyr Tyr Asp Tyr Ser Asn Lys Leu Cys
 115 120 125
 Lys Asp Ala Val Leu Asn Lys Lys Leu Met Met Lys Leu Gln Glu Ser
 130 135 140
 Lys Phe Asp Val Ile Leu Ala Asp Ala Leu Asn Pro Cys Gly Glu Leu
 145 150 155 160
 Leu Ala Glu Leu Phe Asn Ile Pro Phe Leu Tyr Ser Leu Arg Phe Ser
 165 170 175
 Val Gly Tyr Thr Phe Glu Lys Asn Gly Gly Gly Phe Leu Phe Pro Pro
 180 185 190
 Ser Tyr Val Pro Val Val Met Ser Glu Leu Ser Asp Gln Met Ile Phe
 195 200 205
 Met Glu Arg Ile Lys Asn Met Ile His Met Leu Tyr Phe Asp Phe Trp
 210 215 220
 Phe Gln Ile Tyr Asp Leu Lys Lys Trp Asp Gln Phe Tyr Ser Glu Val
 225 230 235 240
 Leu Gly Arg Pro Thr Thr Leu Phe Glu Thr Met Gly Lys Ala Glu Met
 245 250 255
 Trp Leu Ile Arg Thr Tyr Trp Asp Phe Glu Phe Pro Arg Pro Phe Leu
 260 265 270
 Pro Asn Val Asp Phe Val Gly Gly Leu His Cys Lys Pro Ala Lys Pro
 275 280 285
 Leu Pro Lys Glu Met Glu Glu Phe Val Gln Ser Ser Gly Glu Asn Gly
 290 295 300
 Ile Val Val Phe Ser Leu Gly Ser Met Ile Ser Asn Met Ser Glu Glu
 305 310 315 320
 Ser Ala Asn Met Ile Ala Ser Ala Leu Ala Gln Ile Pro Gln Lys Val
 325 330 335
 Leu Trp Arg Phe Asp Gly Lys Lys Pro Asn Thr Leu Gly Ser Asn Thr
 340 345 350
 Arg Leu Tyr Lys Trp Leu Pro Gln Asn Asp Leu Leu Gly His Pro Lys
 355 360 365
 Thr Lys Ala Phe Ile Thr His Gly Gly Thr Asn Gly Ile Tyr Glu Ala
 370 375 380
 Ile Tyr His Gly Ile Pro Met Val Gly Ile Pro Leu Phe Ala Asp Gln
 385 390 395 400

His Asp Asn Ile Ala His Met Lys Ala Lys Gly Ala Ala Leu Ser Val
 405 410 415
 Asp Ile Arg Thr Met Ser Ser Arg Asp Leu Leu Asn Ala Leu Lys Ser
 420 425 430
 Val Ile Asn Asp Pro Val Tyr Lys Glu Asn Val Met Lys Leu Ser Arg
 435 440 445
 Ile His His Asp Gln Pro Met Lys Pro Leu Asp Arg Ala Val Phe Trp
 450 455 460
 Ile Glu Phe Val Met Arg His Lys Gly Ala Lys His Leu Arg Val Ala
 465 470 475 480
 Ala His Asn Leu Thr Trp Ile Gln Tyr His Ser Leu Asp Val Ile Ala
 485 490 495
 Phe Leu Leu Ala Cys Val Ala Thr Val Ile Phe Ile Ile Thr Lys Phe
 500 505 510
 Cys Leu Phe Cys Phe Arg Lys Leu Ala Lys Thr Gly Lys Lys Lys Lys
 515 520 525
 Arg Asp
 530

<210> 151
 <211> 265
 <212> PRT
 <213> Homo sapiens

<400> 151
 Met Gly Ser Pro Ser Ala Cys Pro Tyr Arg Val Cys Ile Pro Trp Gln
 1 5 10 15
 Gly Leu Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Leu Pro Asn
 20 25 30
 Ser Ala Gln Thr Asn Ile Asp Val Val Pro Phe Asn Val Ala Glu Gly
 35 40 45
 Lys Glu Val Leu Leu Val Val His Asn Glu Ser Gln Asn Leu Tyr Gly
 50 55 60
 Tyr Asn Trp Tyr Lys Gly Glu Arg Val His Ala Asn Tyr Arg Ile Ile
 65 70 75 80
 Gly Tyr Val Lys Asn Ile Ser Gln Glu Asn Ala Pro Gly Pro Ala His
 85 90 95
 Asn Gly Arg Glu Thr Ile Tyr Pro Asn Gly Thr Leu Leu Ile Gln Asn
 100 105 110
 Val Thr His Asn Asp Ala Gly Phe Tyr Thr Leu His Val Ile Lys Glu
 115 120 125
 Asn Leu Val Asn Glu Glu Val Thr Arg Gln Phe Tyr Val Phe Ser Glu
 130 135 140
 Pro Pro Lys Pro Ser Ile Thr Ser Asn Asn Phe Asn Pro Val Glu Asn
 145 150 155 160
 Lys Asp Ile Val Val Leu Thr Cys Gln Pro Glu Thr Gln Asn Thr Thr
 165 170 175
 Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Leu Val Ser Pro Arg Leu
 180 185 190
 Leu Leu Ser Thr Asp Asn Arg Thr Leu Val Leu Leu Ser Ala Thr Lys
 195 200 205
 Asn Asp Ile Gly Pro Tyr Glu Cys Glu Ile Gln Asn Pro Val Gly Ala
 210 215 220
 Ser Arg Ser Asp Pro Val Thr Leu Asn Val Arg Tyr Glu Ser Val Gln
 225 230 235 240
 Ala Ser Ser Pro Asp Leu Ser Ala Gly Thr Ala Val Ser Ile Met Ile

				245				250						255
Gly	Val	Leu	Ala	Gly	Met	Ala	Leu	Ile						
			260					265						

<210> 152
 <211> 457
 <212> PRT
 <213> Homo sapiens

<400> 152
 Met Arg Ser Ala Ala Val Leu Ala Leu Leu Leu Cys Ala Gly Gln Val
 1 5 10 15
 Thr Ala Leu Pro Val Asn Ser Pro Met Asn Lys Gly Asp Thr Glu Val
 20 25 30
 Met Lys Cys Ile Val Glu Val Ile Ser Asp Thr Leu Ser Lys Pro Ser
 35 40 45
 Pro Met Pro Val Ser Gln Glu Cys Phe Glu Thr Leu Arg Gly Asp Glu
 50 55 60
 Arg Ile Leu Ser Ile Leu Arg His Gln Asn Leu Leu Lys Glu Leu Gln
 65 70 75 80
 Asp Leu Ala Leu Gln Gly Ala Lys Glu Arg Ala His Gln Gln Lys Lys
 85 90 95
 His Ser Gly Phe Glu Asp Glu Leu Ser Glu Val Leu Glu Asn Gln Ser
 100 105 110
 Ser Gln Ala Glu Leu Lys Glu Ala Val Glu Glu Pro Ser Ser Lys Asp
 115 120 125
 Val Met Glu Lys Arg Glu Asp Ser Lys Glu Ala Glu Lys Ser Gly Glu
 130 135 140
 Ala Thr Asp Gly Ala Arg Pro Gln Ala Leu Pro Glu Pro Met Gln Glu
 145 150 155 160
 Ser Lys Ala Glu Gly Asn Asn Gln Ala Pro Gly Glu Glu Glu Glu Glu
 165 170 175
 Glu Glu Glu Ala Thr Asn Thr His Pro Pro Ala Ser Leu Pro Ser Gln
 180 185 190
 Lys Tyr Pro Gly Pro Gln Ala Glu Gly Asp Ser Glu Gly Leu Ser Gln
 195 200 205
 Gly Leu Val Asp Arg Glu Lys Gly Leu Ser Ala Glu Pro Gly Trp Gln
 210 215 220
 Ala Lys Arg Glu Glu Glu Glu Glu Glu Glu Glu Ala Glu Ala Gly
 225 230 235 240
 Glu Glu Ala Val Pro Glu Glu Glu Gly Pro Thr Val Val Leu Asn Pro
 245 250 255
 His Pro Ser Leu Gly Tyr Lys Glu Ile Arg Lys Gly Glu Ser Arg Ser
 260 265 270
 Glu Ala Leu Ala Val Asp Gly Ala Gly Lys Pro Gly Ala Glu Glu Ala
 275 280 285
 Gln Asp Pro Glu Gly Lys Gly Glu Gln Glu His Ser Gln Gln Lys Glu
 290 295 300
 Glu Glu Glu Glu Met Ala Val Val Pro Gln Gly Leu Phe Arg Gly Gly
 305 310 315 320
 Lys Ser Gly Glu Leu Glu Gln Glu Glu Glu Arg Leu Ser Lys Glu Trp
 325 330 335
 Glu Asp Ser Lys Arg Trp Ser Lys Met Asp Gln Leu Ala Lys Glu Leu
 340 345 350
 Thr Ala Glu Lys Arg Leu Glu Gly Gln Glu Glu Glu Glu Asp Asn Arg
 355 360 365

Asp	Ser	Ser	Met	Lys	Leu	Ser	Phe	Arg	Ala	Arg	Ala	Tyr	Gly	Phe	Arg
370						375					380				
Gly	Pro	Gly	Pro	Gln	Leu	Arg	Arg	Gly	Trp	Arg	Pro	Ser	Ser	Arg	Glu
385					390					395					400
Asp	Ser	Leu	Glu	Ala	Gly	Leu	Pro	Leu	Gln	Val	Arg	Gly	Tyr	Pro	Glu
				405					410					415	
Glu	Lys	Lys	Glu	Glu	Gly	Ser	Ala	Asn	Arg	Arg	Pro	Glu	Asp	Gln	
			420				425					430			
Glu	Leu	Glu	Ser	Leu	Ser	Ala	Ile	Glu	Ala	Glu	Leu	Glu	Lys	Val	Ala
			435				440					445			
His	Gln	Leu	Gln	Ala	Leu	Arg	Arg	Gly							
450						455									

<210> 153
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 153															
Met	His	Val	Asn	Gly	Lys	Val	Ala	Leu	Val	Thr	Gly	Ala	Ala	Gln	Gly
1				5					10					15	
Ile	Gly	Arg	Ala	Phe	Ala	Glu	Ala	Leu	Leu	Leu	Lys	Gly	Ala	Lys	Val
			20					25					30		
Ala	Leu	Val	Asp	Trp	Asn	Leu	Glu	Ala	Gly	Val	Gln	Cys	Lys	Ala	Ala
		35					40				45				
Leu	His	Glu	Gln	Phe	Glu	Pro	Gln	Lys	Thr	Leu	Phe	Ile	Gln	Cys	Asp
		50				55				60					
Val	Ala	Asp	Gln	Gln	Gln	Leu	Arg	Asp	Thr	Phe	Arg	Lys	Val	Val	Asp
65					70					75					80
His	Phe	Gly	Arg	Leu	Asp	Ile	Leu	Val	Asn	Asn	Ala	Gly	Val	Asn	Asn
				85					90					95	
Glu	Lys	Asn	Trp	Glu	Lys	Thr	Leu	Gln	Ile	Asn	Leu	Val	Ser	Val	Ile
			100					105					110		
Ser	Gly	Thr	Tyr	Leu	Gly	Leu	Asp	Tyr	Met	Ser	Lys	Gln	Asn	Gly	Gly
			115				120					125			
Glu	Gly	Gly	Ile	Ile	Ile	Asn	Met	Ser	Ser	Leu	Ala	Gly	Leu	Met	Pro
			130			135				140					
Val	Ala	Gln	Gln	Pro	Val	Tyr	Cys	Ala	Ser	Lys	His	Gly	Ile	Val	Gly
145					150					155					160
Phe	Thr	Arg	Ser	Ala	Ala	Leu	Ala	Ala	Asn	Leu	Met	Asn	Ser	Gly	Val
				165					170					175	
Arg	Leu	Asn	Ala	Ile	Cys	Pro	Gly	Phe	Val	Asn	Thr	Ala	Ile	Leu	Glu
			180					185					190		
Ser	Ile	Glu	Lys	Glu	Glu	Asn	Met	Gly	Gln	Tyr	Ile	Glu	Tyr	Lys	Asp
		195					200					205			
His	Ile	Lys	Asp	Met	Ile	Lys	Tyr	Tyr	Gly	Ile	Leu	Asp	Pro	Pro	Leu
	210					215					220				
Ile	Ala	Asn	Gly	Leu	Ile	Thr	Leu	Ile	Glu	Asp	Asp	Ala	Leu	Asn	Gly
225					230				235						240
Ala	Ile	Met	Lys	Ile	Thr	Thr	Ser	Lys	Gly	Ile	His	Phe	Gln	Asp	Tyr
				245					250					255	
Asp	Thr	Thr	Pro	Phe	Gln	Ala	Lys	Thr	Gln						
			260					265							

<210> 154

<211> 181
 <212> PRT
 <213> Homo sapiens

<400> 154

Met	Phe	Ser	Ala	Ile	Arg	Ser	Gln	His	Ser	Gly	Val	Asp	Ile	Cys	Ile
1				5					10					15	
Asn	Asn	Ala	Gly	Leu	Ala	Arg	Pro	Asp	Thr	Leu	Leu	Ser	Gly	Ser	Thr
			20					25					30		
Ser	Gly	Trp	Lys	Asp	Met	Phe	Asn	Val	Asn	Val	Leu	Ala	Leu	Ser	Ile
			35				40					45			
Cys	Thr	Arg	Glu	Ala	Tyr	Gln	Ser	Met	Lys	Glu	Arg	Asn	Val	Asp	Asp
	50					55					60				
Gly	His	Ile	Ile	Asn	Ile	Asn	Ser	Met	Ser	Gly	His	Arg	Val	Leu	Pro
65					70					75				80	
Leu	Ser	Val	Thr	His	Phe	Tyr	Ser	Ala	Thr	Lys	Tyr	Ala	Val	Thr	Ala
				85					90					95	
Leu	Thr	Glu	Gly	Leu	Arg	Gln	Glu	Leu	Arg	Glu	Ala	Gln	Thr	His	Ile
			100					105					110		
Arg	Ala	Thr	Cys	Ile	Ser	Pro	Gly	Val	Val	Glu	Thr	Gln	Phe	Ala	Phe
		115					120					125			
Lys	Leu	His	Asp	Lys	Asp	Pro	Glu	Lys	Ala	Ala	Ala	Thr	Tyr	Glu	Gln
	130					135				140					
Met	Lys	Cys	Leu	Lys	Pro	Glu	Asp	Val	Ala	Glu	Ala	Val	Ile	Tyr	Val
145					150					155				160	
Leu	Ser	Thr	Pro	Ala	His	Ile	Gln	Ile	Gly	Asp	Ile	Gln	Met	Arg	Pro
				165					170					175	
Thr	Glu	Gln	Val	Thr											
				180											

<210> 155
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 155

Met	Arg	Met	Leu	Leu	Ala	Leu	Leu	Ala	Leu	Ser	Ala	Ala	Arg	Pro	Ser
1				5					10					15	
Ala	Ser	Ala	Glu	Ser	His	Trp	Cys	Tyr	Glu	Val	Gln	Ala	Glu	Ser	Ser
			20					25					30		
Asn	Tyr	Pro	Cys	Leu	Val	Pro	Val	Lys	Trp	Gly	Gly	Asn	Cys	Gln	Lys
		35					40					45			
Asp	Arg	Gln	Ser	Pro	Ile	Asn	Ile	Val	Thr	Thr	Lys	Ala	Lys	Val	Asp
	50					55					60				
Lys	Lys	Leu	Gly	Arg	Phe	Phe	Phe	Ser	Gly	Tyr	Asp	Lys	Lys	Gln	Thr
65					70					75				80	
Trp	Thr	Val	Gln	Asn	Asn	Gly	His	Ser	Val	Met	Met	Leu	Leu	Glu	Asn
				85					90					95	
Lys	Ala	Ser	Ile	Ser	Gly	Gly	Gly	Leu	Pro	Ala	Pro	Tyr	Gln	Ala	Lys
			100					105					110		
Gln	Leu	His	Leu	His	Trp	Ser	Asp	Leu	Pro	Tyr	Lys	Gly	Ser	Glu	His
		115					120					125			
Ser	Leu	Asp	Gly	Glu	His	Phe	Ala	Met	Glu	Met	His	Ile	Val	His	Glu
	130					135					140				
Lys	Glu	Lys	Gly	Thr	Ser	Arg	Asn	Val	Lys	Glu	Ala	Gln	Asp	Pro	Glu
145					150					155				160	

Asp	Glu	Ile	Ala	Val	Leu	Ala	Phe	Leu	Val	Glu	Ala	Gly	Thr	Gln	Val
			165						170					175	
Asn	Glu	Gly	Phe	Gln	Pro	Leu	Val	Glu	Ala	Leu	Ser	Asn	Ile	Pro	Lys
		180						185					190		
Pro	Glu	Met	Ser	Thr	Thr	Met	Ala	Glu	Ser	Ser	Leu	Leu	Asp	Leu	Leu
	195						200					205			
Pro	Lys	Glu	Glu	Lys	Leu	Arg	His	Tyr	Phe	Arg	Tyr	Leu	Gly	Ser	Leu
	210					215					220				
Thr	Thr	Pro	Thr	Cys	Asp	Glu	Lys	Val	Val	Trp	Thr	Val	Phe	Arg	Glu
225					230					235					240
Pro	Ile	Gln	Leu	His	Arg	Glu	Gln	Ile	Leu	Ala	Phe	Ser	Gln	Lys	Leu
				245					250					255	
Tyr	Tyr	Asp	Lys	Glu	Gln	Thr	Val	Ser	Met	Lys	Asp	Asn	Val	Arg	Pro
		260						265					270		
Leu	Gln	Gln	Leu	Gly	Gln	Arg	Thr	Val	Ile	Lys	Ser	Gly	Ala	Pro	Gly
		275					280					285			
Arg	Pro	Leu	Pro	Trp	Ala	Leu	Pro	Ala	Leu	Leu	Gly	Pro	Met	Leu	Ala
	290					295					300				
Cys	Leu	Leu	Ala	Gly	Phe	Leu	Arg								
305						310									

<210> 156

<211> 398

<212> PRT

<213> Homo sapiens

<400> 156

Met	Leu	Arg	Leu	Tyr	Val	Leu	Val	Met	Gly	Val	Ser	Ala	Phe	Thr	Leu
1				5					10					15	
Gln	Pro	Ala	Ala	His	Thr	Gly	Ala	Ala	Arg	Ser	Cys	Arg	Phe	Arg	Gly
			20					25					30		
Arg	His	Tyr	Lys	Arg	Glu	Phe	Arg	Leu	Glu	Gly	Glu	Pro	Val	Ala	Leu
		35					40					45			
Arg	Cys	Pro	Gln	Val	Pro	Tyr	Trp	Leu	Trp	Ala	Ser	Val	Ser	Pro	Arg
	50					55					60				
Ile	Asn	Leu	Thr	Trp	His	Lys	Asn	Asp	Ser	Ala	Arg	Thr	Val	Pro	Gly
65					70				75					80	
Glu	Glu	Glu	Thr	Arg	Met	Trp	Ala	Gln	Asp	Gly	Ala	Leu	Trp	Leu	Leu
				85					90					95	
Pro	Ala	Leu	Gln	Glu	Asp	Ser	Gly	Thr	Tyr	Val	Cys	Thr	Thr	Arg	Asn
			100					105					110		
Ala	Ser	Tyr	Cys	Asp	Lys	Met	Ser	Ile	Glu	Leu	Arg	Val	Phe	Glu	Asn
		115					120					125			
Thr	Asp	Ala	Phe	Leu	Pro	Phe	Ile	Ser	Tyr	Pro	Gln	Ile	Leu	Thr	Leu
	130					135					140				
Ser	Thr	Ser	Gly	Val	Leu	Val	Cys	Pro	Asp	Leu	Ser	Glu	Phe	Thr	Arg
145					150				155						160
Asp	Lys	Thr	Asp	Val	Lys	Ile	Gln	Trp	Tyr	Lys	Asp	Ser	Leu	Leu	Leu
			165						170					175	
Asp	Lys	Asp	Asn	Glu	Lys	Phe	Leu	Ser	Val	Arg	Gly	Thr	Thr	His	Leu
			180					185					190		
Leu	Val	His	Asp	Val	Ala	Leu	Glu	Asp	Ala	Gly	Tyr	Tyr	Arg	Cys	Val
		195					200					205			
Leu	Thr	Phe	Ala	His	Glu	Gly	Gln	Gln	Tyr	Asn	Ile	Thr	Arg	Ser	Ile
	210					215					220				
Glu	Leu	Arg	Ile	Lys	Lys	Lys	Lys	Glu	Glu	Thr	Ile	Pro	Val	Ile	Ile

225					230					235				240	
Ser	Pro	Leu	Lys	Thr	Ile	Ser	Ala	Ser	Leu	Gly	Ser	Arg	Leu	Thr	Ile
				245					250					255	
Pro	Cys	Lys	Val	Phe	Leu	Gly	Thr	Gly	Thr	Pro	Leu	Thr	Thr	Met	Leu
			260					265					270		
Trp	Trp	Thr	Ala	Asn	Asp	Thr	His	Ile	Glu	Ser	Ala	Tyr	Pro	Gly	Gly
		275					280					285			
Arg	Val	Thr	Glu	Gly	Pro	Arg	Gln	Glu	Tyr	Ser	Glu	Asn	Asn	Glu	Asn
	290					295					300				
Tyr	Ile	Glu	Val	Pro	Leu	Ile	Phe	Asp	Pro	Val	Thr	Arg	Glu	Asp	Leu
305					310					315					320
His	Met	Asp	Phe	Lys	Cys	Val	Val	His	Asn	Thr	Leu	Ser	Phe	Gln	Thr
				325					330					335	
Leu	Arg	Thr	Thr	Val	Lys	Glu	Ala	Ser	Ser	Thr	Phe	Ser	Trp	Gly	Ile
			340					345					350		
Val	Leu	Ala	Pro	Leu	Ser	Leu	Ala	Phe	Leu	Val	Leu	Gly	Gly	Ile	Trp
		355					360					365			
Met	His	Arg	Arg	Cys	Lys	His	Arg	Thr	Gly	Lys	Ala	Asp	Gly	Leu	Thr
	370					375					380				
Val	Leu	Trp	Pro	His	His	Gln	Asp	Phe	Gln	Ser	Tyr	Pro	Lys		
385					390					395					

<210> 157
 <211> 160
 <212> PRT
 <213> Homo sapiens

<400> 157															
Met	Glu	Lys	Phe	Asn	Thr	Ile	Ser	Ala	Ser	Lys	Cys	Asn	Lys	Glu	Thr
1				5					10					15	
Val	Ala	Met	Lys	Glu	Lys	Cys	Lys	Phe	Gly	Met	Thr	Ser	Thr	Ile	Pro
			20					25					30		
Ser	Gly	His	Val	Trp	Arg	Asn	Thr	Trp	Asn	Pro	Val	Ser	Cys	Ser	Leu
		35				40						45			
Ala	Thr	Val	Lys	Met	Lys	Glu	Cys	Leu	Arg	Gly	Lys	Leu	Ile	Tyr	Leu
	50					55					60				
Met	Gly	Asp	Ser	Thr	Ile	Arg	Gln	Trp	Met	Glu	Tyr	Phe	Lys	Ala	Ser
65					70				75					80	
Ile	Asn	Thr	Leu	Lys	Ser	Val	Asp	Leu	His	Glu	Ser	Gly	Lys	Leu	Gln
			85					90					95		
His	Gln	Leu	Ala	Val	Asp	Leu	Asp	Arg	Asn	Ile	Asn	Ile	Gln	Trp	Gln
		100						105					110		
Lys	Tyr	Cys	Tyr	Pro	Leu	Ile	Gly	Ser	Met	Thr	Tyr	Ser	Val	Lys	Glu
		115					120					125			
Met	Glu	Tyr	Leu	Thr	Arg	Ala	Ile	Asp	Arg	Thr	Gly	Gly	Glu	Lys	Lys
	130					135					140				
Tyr	Cys	His	Cys	Tyr	Phe	Pro	Gly	Pro	Ala	Phe	Gln	Thr	Leu	Ser	His
145					150					155					160

<210> 158
 <211> 267
 <212> PRT
 <213> Homo sapiens

<400> 158

Met	Met	Ser	Ser	Lys	Pro	Thr	Ser	His	Ala	Glu	Val	Asn	Glu	Thr	Ile
1				5					10					15	
Pro	Asn	Pro	Tyr	Pro	Pro	Gly	Ser	Phe	Met	Ala	Pro	Gly	Phe	Gln	Gln
			20					25					30		
Pro	Leu	Gly	Ser	Ile	Asn	Leu	Glu	Asn	Gln	Ala	Gln	Gly	Ala	Gln	Arg
		35					40					45			
Ala	Gln	Pro	Tyr	Gly	Ile	Thr	Ser	Pro	Gly	Ile	Phe	Ala	Ser	Ser	Gln
	50					55					60				
Pro	Gly	Gln	Gly	Asn	Ile	Gln	Met	Ile	Asn	Pro	Ser	Val	Gly	Thr	Ala
65					70					75					80
Val	Met	Asn	Phe	Lys	Glu	Glu	Ala	Lys	Ala	Leu	Gly	Val	Ile	Gln	Ile
				85					90					95	
Met	Val	Gly	Leu	Met	His	Ile	Gly	Phe	Gly	Ile	Val	Leu	Cys	Leu	Ile
			100					105					110		
Ser	Phe	Ser	Phe	Arg	Glu	Val	Leu	Gly	Phe	Ala	Ser	Thr	Ala	Val	Ile
		115					120					125			
Gly	Gly	Tyr	Pro	Phe	Trp	Gly	Gly	Leu	Ser	Phe	Ile	Ile	Ser	Gly	Ser
	130					135					140				
Leu	Ser	Val	Ser	Ala	Ser	Lys	Glu	Leu	Ser	Arg	Cys	Leu	Val	Lys	Gly
145					150					155					160
Ser	Leu	Gly	Met	Asn	Ile	Val	Ser	Ser	Ile	Leu	Ala	Phe	Ile	Gly	Val
			165						170					175	
Ile	Leu	Leu	Leu	Val	Asp	Met	Cys	Ile	Asn	Gly	Val	Ala	Gly	Gln	Asp
			180					185					190		
Tyr	Trp	Ala	Val	Leu	Ser	Gly	Lys	Gly	Ile	Ser	Ala	Thr	Leu	Met	Ile
		195					200					205			
Phe	Ser	Leu	Leu	Glu	Phe	Phe	Val	Ala	Cys	Ala	Thr	Ala	His	Phe	Ala
		210				215					220				
Asn	Gln	Ala	Asn	Thr	Thr	Thr	Asn	Met	Ser	Val	Leu	Val	Ile	Pro	Asn
225					230					235					240
Met	Tyr	Glu	Ser	Asn	Pro	Val	Thr	Pro	Ala	Ser	Ser	Ser	Ala	Pro	Pro
				245					250					255	
Arg	Cys	Asn	Asn	Tyr	Ser	Ala	Asn	Ala	Pro	Lys					
			260					265							

<210> 159
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 159

Met	Leu	Val	Leu	Leu	Ala	Gly	Ile	Phe	Val	Val	His	Ile	Ala	Thr	Val
1				5					10					15	
Ile	Met	Leu	Phe	Val	Ser	Thr	Ile	Ala	Asn	Val	Trp	Leu	Val	Ser	Asn
			20					25					30		
Thr	Val	Asp	Ala	Ser	Val	Gly	Leu	Trp	Lys	Asn	Cys	Thr	Asn	Ile	Ser
		35					40					45			
Cys	Ser	Asp	Ser	Leu	Ser	Tyr	Ala	Ser	Glu	Asp	Ala	Leu	Lys	Thr	Val
	50					55					60				
Gln	Ala	Phe	Met	Ile	Leu	Ser	Ile	Ile	Phe	Cys	Val	Ile	Ala	Leu	Leu
65					70					75					80
Val	Phe	Val	Phe	Gln	Leu	Phe	Thr	Met	Glu	Lys	Gly	Asn	Arg	Phe	Phe
				85					90					95	
Leu	Ser	Gly	Ala	Thr	Thr	Leu	Val	Cys	Trp	Leu	Cys	Ile	Leu	Val	Gly
			100					105					110		
Val	Ser	Ile	Tyr	Thr	Ser	His	Tyr	Ala	Asn	Arg	Asp	Gly	Thr	Gln	Tyr

	115		120		125
His	His Gly Tyr Ser Tyr	Ile Leu Gly Trp Ile	Cys Phe Cys Phe Ser		
	130	135	140		
Phe	Ile Ile Gly Val Leu Tyr	Leu Val Leu Arg	Lys Lys		
145		150	155		

<210> 160
 <211> 1035
 <212> PRT
 <213> Homo sapiens

<400> 160

Met	Ser	Thr	Glu	Asn	Val	Glu	Gly	Lys	Pro	Ser	Asn	Leu	Gly	Glu	Arg
1				5					10					15	
Gly	Arg	Ala	Arg	Ser	Ser	Thr	Phe	Leu	Arg	Val	Val	Gln	Pro	Met	Phe
			20					25				30			
Asn	His	Ser	Ile	Phe	Thr	Ser	Ala	Val	Ser	Pro	Ala	Ala	Glu	Arg	Ile
		35					40					45			
Arg	Phe	Ile	Leu	Gly	Glu	Glu	Asp	Asp	Ser	Pro	Ala	Pro	Pro	Gln	Leu
	50					55					60				
Phe	Thr	Glu	Leu	Asp	Glu	Leu	Leu	Ala	Val	Asp	Gly	Gln	Glu	Met	Glu
65					70					75				80	
Trp	Lys	Glu	Thr	Ala	Arg	Trp	Ile	Lys	Phe	Glu	Glu	Lys	Val	Glu	Gln
				85					90					95	
Gly	Gly	Glu	Arg	Trp	Ser	Lys	Pro	His	Val	Ala	Thr	Leu	Ser	Leu	His
			100					105					110		
Ser	Leu	Phe	Glu	Leu	Arg	Thr	Cys	Met	Glu	Lys	Gly	Ser	Ile	Met	Leu
		115					120					125			
Asp	Arg	Glu	Ala	Ser	Ser	Leu	Pro	Gln	Leu	Val	Glu	Met	Ile	Val	Asp
	130					135					140				
His	Gln	Ile	Glu	Thr	Gly	Leu	Leu	Lys	Pro	Glu	Leu	Lys	Asp	Lys	Val
145					150					155				160	
Thr	Tyr	Thr	Leu	Leu	Arg	Lys	His	Arg	His	Gln	Thr	Lys	Lys	Ser	Asn
				165					170					175	
Leu	Arg	Ser	Leu	Ala	Asp	Ile	Gly	Lys	Thr	Val	Ser	Ser	Ala	Ser	Arg
			180					185					190		
Met	Phe	Thr	Asn	Pro	Asp	Asn	Gly	Ser	Pro	Ala	Met	Thr	His	Arg	Asn
		195					200					205			
Leu	Thr	Ser	Ser	Ser	Leu	Asn	Asp	Ile	Ser	Asp	Lys	Pro	Glu	Lys	Asp
	210					215					220				
Gln	Leu	Lys	Asn	Lys	Phe	Met	Lys	Lys	Leu	Pro	Arg	Asp	Ala	Glu	Ala
225					230					235				240	
Ser	Asn	Val	Leu	Val	Gly	Glu	Val	Asp	Phe	Leu	Asp	Thr	Pro	Phe	Ile
			245						250					255	
Ala	Phe	Val	Arg	Leu	Gln	Gln	Ala	Val	Met	Leu	Gly	Ala	Leu	Thr	Glu
			260					265					270		
Val	Pro	Val	Pro	Thr	Arg	Phe	Leu	Phe	Ile	Leu	Leu	Gly	Pro	Lys	Gly
		275					280					285			
Lys	Ala	Lys	Ser	Tyr	His	Glu	Ile	Gly	Arg	Ala	Ile	Ala	Thr	Leu	Met
	290					295					300				
Ser	Asp	Glu	Val	Phe	His	Asp	Ile	Ala	Tyr	Lys	Ala	Lys	Asp	Arg	His
305					310					315				320	
Asp	Leu	Ile	Ala	Gly	Ile	Asp	Glu	Phe	Leu	Asp	Glu	Val	Ile	Val	Leu
			325						330					335	
Pro	Pro	Gly	Glu	Trp	Asp	Pro	Ala	Ile	Arg	Ile	Glu	Pro	Pro	Lys	Ser
			340					345					350		

Leu	Pro	Ser	Ser	Asp	Lys	Arg	Lys	Asn	Met	Tyr	Ser	Gly	Gly	Glu	Asn
		355					360					365			
Val	Gln	Met	Asn	Gly	Asp	Thr	Pro	His	Asp	Gly	Gly	His	Gly	Gly	Gly
	370					375					380				
Gly	His	Gly	Asp	Cys	Glu	Glu	Leu	Gln	Arg	Thr	Gly	Arg	Phe	Cys	Gly
385				390						395					400
Gly	Leu	Ile	Lys	Asp	Ile	Lys	Arg	Lys	Ala	Pro	Phe	Phe	Ala	Ser	Asp
			405					410						415	
Phe	Tyr	Asp	Ala	Leu	Asn	Ile	Gln	Ala	Leu	Ser	Ala	Ile	Leu	Phe	Ile
		420					425					430			
Tyr	Leu	Ala	Thr	Val	Thr	Asn	Ala	Ile	Thr	Phe	Gly	Gly	Leu	Leu	Gly
	435					440						445			
Asp	Ala	Thr	Asp	Asn	Met	Gln	Gly	Val	Leu	Glu	Ser	Phe	Leu	Gly	Thr
	450					455					460				
Ala	Val	Ser	Gly	Ala	Ile	Phe	Cys	Leu	Phe	Ala	Gly	Gln	Pro	Leu	Thr
465				470					475						480
Ile	Leu	Ser	Ser	Thr	Gly	Pro	Val	Leu	Val	Phe	Glu	Arg	Leu	Leu	Phe
			485					490					495		
Asn	Phe	Ser	Lys	Asp	Asn	Asn	Phe	Asp	Tyr	Leu	Glu	Phe	Arg	Leu	Trp
		500					505					510			
Ile	Gly	Leu	Trp	Ser	Ala	Phe	Leu	Cys	Leu	Ile	Leu	Val	Ala	Thr	Asp
	515					520						525			
Ala	Ser	Phe	Leu	Val	Gln	Tyr	Phe	Thr	Arg	Phe	Thr	Glu	Glu	Gly	Phe
	530				535					540					
Ser	Ser	Leu	Ile	Ser	Phe	Ile	Phe	Ile	Tyr	Asp	Ala	Phe	Lys	Lys	Met
545				550					555						560
Ile	Lys	Leu	Ala	Asp	Tyr	Tyr	Pro	Ile	Asn	Ser	Asn	Phe	Lys	Val	Gly
			565					570						575	
Tyr	Asn	Thr	Leu	Phe	Ser	Cys	Thr	Cys	Val	Pro	Pro	Asp	Pro	Ala	Asn
		580					585					590			
Ile	Ser	Ile	Ser	Asn	Asp	Thr	Thr	Leu	Ala	Pro	Glu	Tyr	Leu	Pro	Thr
	595					600					605				
Met	Ser	Ser	Thr	Asp	Met	Tyr	His	Asn	Thr	Thr	Phe	Asp	Trp	Ala	Phe
	610				615					620					
Leu	Ser	Lys	Lys	Glu	Cys	Ser	Lys	Tyr	Gly	Gly	Asn	Leu	Val	Gly	Asn
625				630					635						640
Asn	Cys	Asn	Phe	Val	Pro	Asp	Ile	Thr	Leu	Met	Ser	Phe	Ile	Leu	Phe
			645					650						655	
Leu	Gly	Thr	Tyr	Thr	Ser	Ser	Met	Ala	Leu	Lys	Lys	Phe	Lys	Thr	Ser
		660					665					670			
Pro	Tyr	Phe	Pro	Thr	Thr	Ala	Arg	Lys	Leu	Ile	Ser	Asp	Phe	Ala	Ile
	675					680						685			
Ile	Leu	Ser	Ile	Leu	Ile	Phe	Cys	Val	Ile	Asp	Ala	Leu	Val	Gly	Val
	690				695					700					
Asp	Thr</														

Ile	Asp	Ala	Ala	Ser	Pro	Leu	Glu	Lys	Val	Cys	Leu	Ile	Gly	Cys	Gly		
				165					170					175			
Phe	Ser	Thr	Gly	Tyr	Gly	Ser	Ala	Val	Lys	Val	Ala	Lys	Val	Thr	Pro		
			180					185					190				
Gly	Ser	Thr	Cys	Ala	Val	Phe	Gly	Leu	Gly	Gly	Val	Gly	Leu	Ser	Val		
		195					200					205					
Val	Met	Gly	Cys	Lys	Ala	Ala	Gly	Ala	Ala	Arg	Ile	Ile	Ala	Val	Asp		
	210					215					220						
Ile	Asn	Lys	Asp	Lys	Phe	Ala	Lys	Ala	Lys	Glu	Leu	Gly	Ala	Thr	Glu		
225					230					235					240		
Cys	Ile	Asn	Pro	Gln	Asp	Tyr	Lys	Lys	Pro	Ile	Gln	Glu	Val	Leu	Lys		
				245					250					255			
Glu	Met	Thr	Asp	Gly	Gly	Val	Asp	Phe	Ser	Phe	Glu	Val	Ile	Gly	Arg		
			260					265					270				
Leu	Asp	Thr	Met	Met	Ala	Ser	Leu	Leu	Cys	Cys	His	Glu	Ala	Cys	Gly		
		275					280						285				
Thr	Ser	Val	Ile	Val	Gly	Val	Pro	Pro	Asp	Ser	Gln	Asn	Leu	Ser	Ile		
		290				295					300						
Asn	Pro	Met	Leu	Leu	Leu	Thr	Gly	Arg	Thr	Trp	Lys	Gly	Ala	Ile	Phe		
305					310					315					320		
Gly	Gly	Phe	Lys	Ser	Lys	Glu	Ser	Val	Pro	Lys	Leu	Val	Ala	Asp	Phe		
				325					330					335			
Met	Ala	Lys	Lys	Phe	Ser	Leu	Asp	Ala	Leu	Ile	Thr	Asn	Ile	Leu	Pro		
			340					345					350				
Phe	Glu	Lys	Ile	Asn	Glu	Gly	Phe	Asp	Leu	Leu	Arg	Ser	Gly	Lys	Ser		
		355					360					365					
Ile	Arg	Thr	Val	Leu	Thr	Phe											
	370					375											

<210> 162
 <211> 526
 <212> PRT
 <213> Homo sapiens

<400> 162

Met	Gly	His	Leu	Ser	Ala	Pro	Leu	His	Arg	Val	Arg	Val	Pro	Trp	Gln		
1				5					10					15			
Gly	Leu	Leu	Leu	Thr	Ala	Ser	Leu	Leu	Thr	Phe	Trp	Asn	Pro	Pro	Thr		
			20					25					30				
Thr	Ala	Gln	Leu	Thr	Thr	Glu	Ser	Met	Pro	Phe	Asn	Val	Ala	Glu	Gly		
		35					40					45					
Lys	Glu	Val	Leu	Leu	Leu	Val	His	Asn	Leu	Pro	Gln	Gln	Leu	Phe	Gly		
	50					55					60						
Tyr	Ser	Trp	Tyr	Lys	Gly	Glu	Arg	Val	Asp	Gly	Asn	Arg	Gln	Ile	Val		
65					70					75					80		
Gly	Tyr	Ala	Ile	Gly	Thr	Gln	Gln	Ala	Thr	Pro	Gly	Pro	Ala	Asn	Ser		
				85					90					95			
Gly	Arg	Glu	Thr	Ile	Tyr	Pro	Asn	Ala	Ser	Leu	Leu	Ile	Gln	Asn	Val		
			100					105					110				
Thr	Gln	Asn	Asp	Thr	Gly	Phe	Tyr	Thr	Leu	Gln	Val	Ile	Lys	Ser	Asp		
		115					120						125				
Leu	Val	Asn	Glu	Glu	Ala	Thr	Gly	Gln	Phe	His	Val	Tyr	Pro	Glu	Leu		
		130				135					140						
Pro	Lys	Pro	Ser	Ile	Ser	Ser	Asn	Asn	Ser	Asn	Pro	Val	Glu	Asp	Lys		
145					150					155					160		
Asp	Ala	Val	Ala	Phe	Thr	Cys	Glu	Pro	Glu	Thr	Gln	Asp	Thr	Thr	Tyr		

Gly	Leu	Arg	Trp	Phe	Thr	Pro	Ala	Ser	Glu	Val	Pro	Leu	Cys	Gly	His
	35						40					45			
Ala	Thr	Leu	Ala	Ser	Ala	Ala	Val	Leu	Phe	His	Lys	Ile	Lys	Asn	Met
	50					55					60				
Asn	Ser	Thr	Leu	Thr	Phe	Val	Thr	Leu	Ser	Gly	Glu	Leu	Arg	Ala	Arg
65					70					75					80
Arg	Ala	Glu	Asp	Gly	Ile	Val	Leu	Asp	Leu	Pro	Leu	Tyr	Pro	Ala	His
				85					90					95	
Pro	Gln	Asp	Phe	His	Glu	Val	Glu	Asp	Leu	Ile	Lys	Thr	Ala	Ile	Gly
			100					105					110		
Asn	Thr	Leu	Val	Gln	Asp	Ile	Cys	Tyr	Ser	Pro	Asp	Thr	Gln	Lys	Leu
		115					120					125			
Leu	Val	Arg	Leu	Ser	Asp	Val	Tyr	Asn	Arg	Ser	Phe	Leu	Glu	Asn	Leu
	130					135					140				
Lys	Val	Asn	Thr	Glu	Asn	Leu	Leu	Gln	Val	Glu	Asn	Thr	Gly	Lys	Val
145					150					155					160
Lys	Gly	Leu	Ile	Leu	Thr	Leu	Lys	Gly	Glu	Pro	Gly	Gly	Gln	Thr	Gln
				165					170					175	
Ala	Phe	Asp	Phe	Tyr	Ser	Arg	Tyr	Phe	Ala	Pro	Trp	Val	Gly	Val	Ala
			180					185					190		
Glu	Asp	Pro	Val	Thr	Gly	Ser	Ala	His	Ala	Val	Leu	Ser	Ser	Tyr	Trp
	195						200					205			
Ser	Gln	His	Leu	Gly	Lys	Lys	Glu	Met	His	Ala	Phe	Gln	Cys	Ser	His
	210					215					220				
Arg	Gly	Gly	Glu	Leu	Gly	Ile	Ser	Leu	Arg	Pro	Asp	Gly	Arg	Val	Asp
225					230				235						240
Ile	Arg	Gly	Gly	Ala	Ala	Val	Val	Leu	Glu	Gly	Thr	Leu	Thr	Ala	
				245					250					255	

<210> 164
 <211> 622
 <212> PRT
 <213> Homo sapiens

<400> 164
 Met Pro Pro Gln Leu Gln Asn Gly Leu Asn Leu Ser Ala Lys Val Val
 1 5 10 15
 Gln Gly Ser Leu Asp Ser Leu Pro Gln Ala Val Arg Glu Phe Leu Glu
 20 25 30
 Asn Asn Ala Glu Leu Cys Gln Pro Asp His Ile His Ile Cys Asp Gly
 35 40 45
 Ser Glu Glu Glu Asn Gly Arg Leu Leu Gly Gln Met Glu Glu Gly
 50 55 60
 Ile Leu Arg Arg Leu Lys Lys Tyr Asp Asn Cys Trp Leu Ala Leu Thr
 65 70 75 80
 Asp Pro Arg Asp Val Ala Arg Ile Glu Ser Lys Thr Val Ile Val Thr
 85 90 95
 Gln Glu Gln Arg Asp Thr Val Pro Ile Pro Lys Thr Gly Leu Ser Gln
 100 105 110
 Leu Gly Arg Trp Met Ser Glu Glu Asp Phe Glu Lys Ala Phe Asn Ala
 115 120 125
 Arg Phe Pro Gly Cys Met Lys Gly Arg Thr Met Tyr Val Ile Pro Phe
 130 135 140
 Ser Met Gly Pro Leu Gly Ser Pro Leu Ser Lys Ile Gly Ile Glu Leu
 145 150 155 160
 Thr Asp Ser Pro Tyr Val Val Ala Ser Met Arg Ile Met Thr Arg Met

				165					170					175			
Gly	Thr	Pro	Val	Leu	Glu	Ala	Leu	Gly	Asp	Gly	Glu	Phe	Val	Lys	Cys		
			180					185					190				
Leu	His	Ser	Val	Gly	Cys	Pro	Leu	Pro	Leu	Gln	Lys	Pro	Leu	Val	Asn		
		195					200					205					
Asn	Trp	Pro	Cys	Asn	Pro	Glu	Leu	Thr	Leu	Ile	Ala	His	Leu	Pro	Asp		
	210					215					220						
Arg	Arg	Glu	Ile	Ile	Ser	Phe	Gly	Ser	Gly	Tyr	Gly	Gly	Asn	Ser	Leu		
	225				230					235					240		
Leu	Gly	Lys	Lys	Cys	Phe	Ala	Leu	Arg	Met	Ala	Ser	Arg	Leu	Ala	Glu		
				245					250					255			
Glu	Glu	Gly	Trp	Leu	Ala	Glu	His	Met	Leu	Ile	Leu	Gly	Ile	Thr	Asn		
			260					265					270				
Pro	Glu	Gly	Glu	Lys	Lys	Tyr	Leu	Ala	Ala	Ala	Phe	Pro	Ser	Ala	Cys		
		275					280					285					
Gly	Lys	Thr	Asn	Leu	Ala	Met	Met	Asn	Pro	Ser	Leu	Pro	Gly	Trp	Lys		
	290					295					300						
Val	Glu	Cys	Val	Gly	Asp	Asp	Ile	Ala	Trp	Met	Lys	Phe	Asp	Ala	Gln		
	305				310					315					320		
Gly	His	Leu	Arg	Ala	Ile	Asn	Pro	Glu	Asn	Gly	Phe	Phe	Gly	Val	Ala		
				325				330						335			
Pro	Gly	Thr	Ser	Val	Lys	Thr	Asn	Pro	Asn	Ala	Ile	Lys	Thr	Ile	Gln		
			340					345					350				
Lys	Asn	Thr	Ile	Phe	Thr	Asn	Val	Ala	Glu	Thr	Ser	Asp	Gly	Gly	Val		
		355				360						365					
Tyr	Trp	Glu	Gly	Ile	Asp	Glu	Pro	Leu	Ala	Ser	Gly	Val	Thr	Ile	Thr		
	370					375					380						
Ser	Trp	Lys	Asn	Lys	Glu	Trp	Ser	Ser	Glu	Asp	Gly	Glu	Pro	Cys	Ala		
	385				390					395					400		
His	Pro	Asn	Ser	Arg	Phe	Cys	Thr	Pro	Ala	Ser	Gln	Cys	Pro	Ile	Ile		
				405					410					415			
Asp	Ala	Ala	Trp	Glu	Ser	Pro	Glu	Gly	Val	Pro	Ile	Glu	Gly	Ile	Ile		
			420					425					430				
Phe	Gly	Gly	Arg	Arg	Pro	Ala	Gly	Val	Pro	Leu	Val	Tyr	Glu	Ala	Leu		
		435					440					445					
Ser	Trp	Gln	His	Gly	Val	Phe	Val	Gly	Ala	Ala	Met	Arg	Ser	Glu	Ala		
	450					455					460						
Thr	Ala	Ala	Ala	Glu	His	Lys	Gly	Lys	Ile	Ile	Met	His	Asp	Pro	Phe		
	465				470					475					480		
Ala	Met	Arg	Pro	Phe	Phe	Gly	Tyr	Asn	Phe	Gly	Lys	Tyr	Leu	Ala	His		
				485					490					495			
Trp	Leu	Ser	Met	Ala	Gln	His	Pro	Ala	Ala	Lys	Leu	Pro	Lys	Ile	Phe		
			500					505					510				
His	Val	Asn	Trp	Phe	Arg	Lys	Asp	Lys	Glu	Gly	Lys	Phe	Leu	Trp	Pro		
		515					520					525					
Gly	Phe	Gly	Glu	Asn	Ser	Arg	Val	Leu	Glu	Trp	Met	Phe	Asn	Arg	Ile		
	530					535					540						
Asp	Gly	Lys	Ala	Ser	Thr	Asn	Val	Thr	Pro	Ile	Gly	Tyr	Ile	Pro	Lys		
	545				550					555					560		
Glu	Asp	Ala	Leu	Asn	Leu	Lys	Gly	Leu	Gly	His	Ile	Asn	Met	Met	Glu		
				565				570						575			
Leu	Phe	Ser	Ile	Ser	Lys	Glu	Phe	Trp	Asp	Lys	Glu	Val	Glu	Asp	Ile		
			580					585					590				
Glu	Lys	Tyr	Leu	Val	Asp	Gln	Val	Asn	Ala	Asp	Leu	Pro	Cys	Glu	Ile		
		595				600						605					
Glu	Arg	Glu	Ile	Leu	Ala	Leu	Lys	Gln	Arg	Ile	Ser	Gln	Met				
	610					615						620					

<210> 165
 <211> 530
 <212> PRT
 <213> Homo sapiens

<400> 165

Met	Ser	Leu	Lys	Trp	Met	Ser	Val	Phe	Leu	Leu	Met	Gln	Leu	Ser	Cys
1				5					10					15	
Tyr	Phe	Ser	Ser	Gly	Ser	Cys	Gly	Lys	Val	Leu	Val	Trp	Pro	Thr	Glu
			20					25					30		
Tyr	Ser	His	Trp	Ile	Asn	Met	Lys	Thr	Ile	Leu	Glu	Glu	Leu	Val	Gln
		35					40					45			
Arg	Gly	His	Glu	Val	Ile	Val	Leu	Thr	Ser	Ser	Ala	Ser	Ile	Leu	Val
	50					55					60				
Asn	Ala	Ser	Lys	Ser	Ser	Ala	Ile	Lys	Leu	Glu	Val	Tyr	Pro	Thr	Ser
65					70					75					80
Leu	Thr	Lys	Asn	Asp	Leu	Glu	Asp	Phe	Phe	Met	Lys	Met	Phe	Asp	Arg
			85					90						95	
Trp	Thr	Tyr	Ser	Ile	Ser	Lys	Asn	Thr	Phe	Trp	Ser	Tyr	Phe	Ser	Gln
			100					105					110		
Leu	Gln	Glu	Leu	Cys	Trp	Glu	Tyr	Ser	Asp	Tyr	Asn	Ile	Lys	Leu	Cys
	115						120					125			
Glu	Asp	Ala	Val	Leu	Asn	Lys	Lys	Leu	Met	Arg	Lys	Leu	Gln	Glu	Ser
	130					135					140				
Lys	Phe	Asp	Val	Leu	Leu	Ala	Asp	Ala	Val	Asn	Pro	Cys	Gly	Glu	Leu
145					150					155					160
Leu	Ala	Glu	Leu	Leu	Asn	Ile	Pro	Phe	Leu	Tyr	Ser	Leu	Arg	Phe	Ser
			165					170						175	
Val	Gly	Tyr	Thr	Val	Glu	Lys	Asn	Gly	Gly	Gly	Phe	Leu	Phe	Pro	Pro
			180					185					190		
Ser	Tyr	Val	Pro	Val	Val	Met	Ser	Glu	Leu	Ser	Asp	Gln	Met	Ile	Phe
		195				200						205			
Met	Glu	Arg	Ile	Lys	Asn	Met	Ile	Tyr	Met	Leu	Tyr	Phe	Asp	Phe	Trp
	210					215					220				
Phe	Gln	Ala	Tyr	Asp	Leu	Lys	Lys	Trp	Asp	Gln	Phe	Tyr	Ser	Glu	Val
225					230					235					240
Leu	Gly	Arg	Pro	Thr	Thr	Leu	Phe	Glu	Thr	Met	Gly	Lys	Ala	Glu	Met
			245					250						255	
Trp	Leu	Ile	Arg	Thr	Tyr	Trp	Asp	Phe	Glu	Phe	Pro	Arg	Pro	Phe	Leu
		260					265						270		
Pro	Asn	Val	Asp	Phe	Val	Gly	Gly	Leu	His	Cys	Lys	Pro	Ala	Lys	Pro
		275					280					285			
Leu	Pro	Lys	Glu	Met	Glu	Glu	Phe	Val	Gln	Ser	Ser	Gly	Glu	Asn	Gly
	290					295					300				
Ile	Val	Val	Phe	Ser	Leu	Gly	Ser	Met	Ile	Ser	Asn	Met	Ser	Glu	Glu
305					310					315					320
Ser	Ala	Asn	Met	Ile	Ala	Ser	Ala	Leu	Ala	Gln	Ile	Pro	Gln	Lys	Val
			325					330						335	
Leu	Trp	Arg	Phe	Asp	Gly	Lys	Lys	Pro	Asn	Thr	Leu	Gly	Ser	Asn	Thr
		340						345					350		
Arg	Leu	Tyr	Lys	Trp	Leu	Pro	Gln	Asn	Asp	Leu	Leu	Gly	His	Pro	Lys
		355					360					365			
Thr	Lys	Ala	Phe	Ile	Thr	His	Gly	Gly	Thr	Asn	Gly	Ile	Tyr	Glu	Ala
	370					375					380				
Ile	Tyr	His	Gly	Ile	Pro	Met	Val	Gly	Ile	Pro	Leu	Phe	Ala	Asp	Gln

385					390					395				400	
His	Asp	Asn	Ile	Ala	His	Met	Lys	Ala	Lys	Gly	Ala	Ala	Leu	Ser	Val
				405					410					415	
Asp	Ile	Arg	Thr	Met	Ser	Ser	Arg	Asp	Leu	Leu	Asn	Ala	Leu	Lys	Ser
			420					425					430		
Val	Ile	Asn	Asp	Pro	Ile	Tyr	Lys	Glu	Asn	Ile	Met	Lys	Leu	Ser	Arg
		435					440					445			
Ile	His	His	Asp	Gln	Pro	Val	Lys	Pro	Leu	Asp	Arg	Ala	Val	Phe	Trp
	450					455				460					
Ile	Glu	Phe	Val	Met	Arg	His	Lys	Gly	Ala	Lys	His	Leu	Arg	Val	Ala
465					470				475					480	
Ala	His	Asn	Leu	Thr	Trp	Ile	Gln	Tyr	His	Ser	Leu	Asp	Val	Ile	Ala
				485				490					495		
Phe	Leu	Leu	Ala	Cys	Val	Ala	Thr	Met	Ile	Phe	Met	Ile	Thr	Lys	Cys
			500					505				510			
Cys	Leu	Phe	Cys	Phe	Arg	Lys	Leu	Ala	Lys	Thr	Gly	Lys	Lys	Lys	Lys
		515					520					525			
Arg	Asp														
	530														

<210> 166
 <211> 387
 <212> PRT
 <213> Homo sapiens

<400> 166															
Met	Ser	Thr	Phe	Phe	Ser	Asp	Thr	Ala	Trp	Ile	Cys	Leu	Ala	Val	Pro
1				5					10					15	
Thr	Val	Leu	Cys	Gly	Thr	Val	Phe	Cys	Lys	Tyr	Lys	Lys	Ser	Ser	Gly
			20					25					30		
Gln	Leu	Trp	Ser	Trp	Met	Val	Cys	Leu	Ala	Gly	Leu	Cys	Ala	Val	Cys
		35					40					45			
Leu	Leu	Ile	Leu	Ser	Pro	Phe	Trp	Gly	Leu	Ile	Leu	Phe	Ser	Val	Ser
	50					55				60					
Cys	Phe	Leu	Met	Tyr	Thr	Tyr	Leu	Ser	Gly	Gln	Glu	Leu	Leu	Pro	Val
65					70				75					80	
Asp	Gln	Lys	Ala	Val	Leu	Val	Thr	Gly	Gly	Asp	Cys	Gly	Leu	Gly	His
				85				90					95		
Ala	Leu	Cys	Lys	Tyr	Leu	Asp	Glu	Leu	Gly	Phe	Thr	Val	Phe	Ala	Gly
		100					105					110			
Val	Leu	Asn	Glu	Asn	Gly	Pro	Gly	Ala	Glu	Glu	Leu	Arg	Arg	Thr	Cys
		115					120					125			
Ser	Pro	Arg	Leu	Ser	Val	Leu	Gln	Met	Asp	Ile	Thr	Lys	Pro	Val	Gln
	130					135					140				
Ile	Lys	Asp	Ala	Tyr	Ser	Lys	Val	Ala	Ala	Met	Leu	Gln	Asp	Arg	Gly
145					150				155					160	
Leu	Trp	Ala	Val	Ile	Asn	Asn	Ala	Gly	Val	Leu	Gly	Phe	Pro	Thr	Asp
			165					170					175		
Gly	Glu	Leu	Leu	Leu	Met	Thr	Asp	Tyr	Lys	Gln	Cys	Met	Ala	Val	Asn
		180					185					190			
Phe	Phe	Gly	Thr	Val	Glu	Val	Thr	Lys	Thr	Phe	Leu	Pro	Leu	Leu	Arg
	195						200				205				
Lys	Ser	Lys	Gly	Arg	Leu	Val	Asn	Val	Ser	Ser	Met	Gly	Gly	Gly	Ala
	210				215				220						
Pro	Met	Glu	Arg	Leu	Ala	Ser	Tyr	Gly	Ser	Ser	Lys	Ala	Ala	Val	Thr
225					230				235					240	

Met	Phe	Ser	Ser	Val	Met	Arg	Leu	Glu	Leu	Ser	Lys	Trp	Gly	Ile	Lys
				245					250					255	
Val	Ala	Ser	Ile	Gln	Pro	Gly	Gly	Phe	Leu	Thr	Asn	Ile	Ala	Gly	Thr
			260					265					270		
Ser	Asp	Lys	Trp	Glu	Lys	Leu	Glu	Lys	Asp	Ile	Leu	Asp	His	Leu	Pro
		275					280					285			
Ala	Glu	Val	Gln	Glu	Asp	Tyr	Gly	Gln	Asp	Tyr	Ile	Leu	Ala	Gln	Arg
		290				295					300				
Asn	Phe	Leu	Leu	Leu	Ile	Asn	Ser	Leu	Ala	Ser	Lys	Asp	Phe	Ser	Pro
305					310					315					320
Val	Leu	Arg	Asp	Ile	Gln	His	Ala	Ile	Leu	Ala	Lys	Ser	Pro	Phe	Ala
				325					330					335	
Tyr	Tyr	Thr	Pro	Gly	Lys	Gly	Ala	Tyr	Leu	Trp	Ile	Cys	Leu	Ala	His
			340					345					350		
Tyr	Leu	Pro	Ile	Gly	Ile	Tyr	Asp	Tyr	Phe	Ala	Lys	Arg	His	Phe	Gly
		355					360					365			
Gln	Asp	Lys	Pro	Met	Pro	Arg	Ala	Leu	Arg	Met	Pro	Asn	Tyr	Lys	Lys
	370					375					380				
Lys	Ala	Thr													
385															

<210> 167
 <211> 196
 <212> PRT
 <213> Homo sapiens

<400> 167															
Met	Gly	Ser	Arg	Ser	Ser	His	Ala	Ala	Val	Ile	Pro	Asp	Gly	Asp	Ser
1				5					10					15	
Ile	Arg	Arg	Glu	Thr	Gly	Phe	Ser	Gln	Ala	Ser	Leu	Leu	Arg	Leu	His
			20					25					30		
His	Arg	Phe	Arg	Ala	Leu	Asp	Arg	Asn	Lys	Lys	Gly	Tyr	Leu	Ser	Arg
		35					40					45			
Met	Asp	Leu	Gln	Gln	Ile	Gly	Ala	Leu	Ala	Val	Asn	Pro	Leu	Gly	Asp
	50					55					60				
Arg	Ile	Ile	Glu	Ser	Phe	Phe	Pro	Asp	Gly	Ser	Gln	Arg	Val	Asp	Phe
65					70					75				80	
Pro	Gly	Phe	Val	Arg	Val	Leu	Ala	His	Phe	Arg	Pro	Val	Glu	Asp	Glu
				85						90				95	
Asp	Thr	Glu	Thr	Gln	Asp	Pro	Lys	Lys	Pro	Glu	Pro	Leu	Asn	Ser	Arg
			100					105					110		
Arg	Asn	Lys	Leu	His	Tyr	Ala	Phe	Gln	Leu	Tyr	Asp	Leu	Asp	Arg	Asp
		115					120					125			
Gly	Lys	Ile	Ser	Arg	His	Glu	Met	Leu	Gln	Val	Leu	Arg	Leu	Met	Val
	130					135					140				
Gly	Val	Gln	Val	Thr	Glu	Glu	Gln	Leu	Glu	Asn	Ile	Ala	Asp	Arg	Thr
145					150					155				160	
Val	Gln	Glu	Ala	Asp	Glu	Asp	Gly	Asp	Gly	Ala	Val	Ser	Phe	Val	Glu
				165					170					175	
Phe	Thr	Lys	Ser	Leu	Glu	Lys	Met	Asp	Val	Glu	Gln	Lys	Met	Ser	Ile
			180					185					190		
Arg	Ile	Leu	Lys												
		195													

<210> 168

<211> 319
 <212> PRT
 <213> Homo sapiens

<400> 168

Met	Leu	Phe	Trp	Val	Leu	Gly	Leu	Leu	Ile	Leu	Cys	Gly	Phe	Leu	Trp
1				5					10					15	
Thr	Arg	Lys	Gly	Lys	Leu	Lys	Ile	Glu	Asp	Ile	Thr	Asp	Lys	Tyr	Ile
			20					25					30		
Phe	Ile	Thr	Gly	Cys	Asp	Ser	Gly	Phe	Gly	Asn	Leu	Ala	Ala	Arg	Thr
		35					40					45			
Phe	Asp	Lys	Lys	Gly	Phe	His	Val	Ile	Ala	Ala	Cys	Leu	Thr	Glu	Ser
	50					55					60				
Gly	Ser	Thr	Ala	Leu	Lys	Ala	Glu	Thr	Ser	Glu	Arg	Leu	Arg	Thr	Val
65					70					75					80
Leu	Leu	Asp	Val	Thr	Asp	Pro	Glu	Asn	Val	Lys	Arg	Thr	Ala	Gln	Trp
			85						90					95	
Val	Lys	Asn	Gln	Val	Gly	Glu	Lys	Gly	Leu	Trp	Gly	Leu	Ile	Asn	Asn
			100					105					110		
Ala	Gly	Val	Pro	Gly	Val	Leu	Ala	Pro	Thr	Asp	Trp	Leu	Thr	Leu	Glu
		115					120					125			
Asp	Tyr	Arg	Glu	Pro	Ile	Glu	Val	Asn	Leu	Phe	Gly	Leu	Ile	Ser	Val
	130					135					140				
Thr	Leu	Asn	Met	Leu	Pro	Leu	Val	Lys	Lys	Ala	Gln	Gly	Arg	Val	Ile
145					150					155					160
Asn	Val	Ser	Ser	Val	Gly	Gly	Arg	Leu	Ala	Ile	Val	Gly	Gly	Gly	Tyr
			165						170					175	
Thr	Pro	Ser	Lys	Tyr	Ala	Val	Glu	Gly	Phe	Asn	Asp	Ser	Leu	Arg	Arg
			180					185					190		
Asp	Met	Lys	Ala	Phe	Gly	Val	His	Val	Ser	Cys	Ile	Glu	Pro	Gly	Leu
		195					200					205			
Phe	Lys	Thr	Asn	Leu	Ala	Asp	Pro	Val	Lys	Val	Ile	Glu	Lys	Lys	Leu
	210					215					220				
Ala	Ile	Trp	Glu	Gln	Leu	Ser	Pro	Asp	Ile	Lys	Gln	Gln	Tyr	Gly	Glu
225					230					235					240
Gly	Tyr	Ile	Glu	Lys	Ser	Leu	Asp	Lys	Leu	Lys	Gly	Asn	Lys	Ser	Tyr
				245					250					255	
Val	Asn	Met	Asp	Leu	Ser	Pro	Val	Val	Glu	Cys	Met	Asp	His	Ala	Leu
		260						265					270		
Thr	Ser	Leu	Phe	Pro	Lys	Thr	His	Tyr	Ala	Ala	Gly	Lys	Asp	Ala	Lys
		275					280					285			
Ile	Phe	Trp	Ile	Pro	Leu	Ser	His	Met	Pro	Ala	Ala	Leu	Gln	Asp	Phe
	290					295					300				
Leu	Leu	Leu	Lys	Gln	Lys	Ala	Glu	Leu	Ala	Asn	Pro	Lys	Ala	Val	
305					310					315					

<210> 169
 <211> 200
 <212> PRT
 <213> Homo sapiens

<400> 169

Met	Gly	Gln	Glu	Phe	Ser	Trp	Glu	Glu	Ala	Glu	Ala	Ala	Gly	Glu	Ile
1				5					10					15	
Asp	Val	Ala	Glu	Leu	Gln	Glu	Trp	Tyr	Lys	Lys	Phe	Val	Met	Glu	Cys
			20					25					30		

Pro	Ser	Gly	Thr	Leu	Phe	Met	His	Glu	Phe	Lys	Arg	Phe	Phe	Lys	Val
		35					40					45			
Thr	Asp	Asp	Glu	Glu	Ala	Ser	Gln	Tyr	Val	Glu	Gly	Met	Phe	Arg	Ala
	50					55					60				
Phe	Asp	Lys	Asn	Gly	Asp	Asn	Thr	Ile	Asp	Phe	Leu	Glu	Tyr	Val	Ala
65				70					75					80	
Ala	Leu	Asn	Leu	Val	Leu	Arg	Gly	Thr	Leu	Glu	His	Lys	Leu	Lys	Trp
			85						90					95	
Thr	Phe	Lys	Ile	Tyr	Asp	Lys	Asp	Gly	Asn	Gly	Cys	Ile	Asp	Arg	Leu
			100					105					110		
Glu	Leu	Leu	Asn	Ile	Val	Glu	Gly	Ile	Tyr	Gln	Leu	Lys	Lys	Ala	Cys
		115					120					125			
Arg	Arg	Glu	Leu	Gln	Thr	Glu	Gln	Asp	Gln	Leu	Leu	Thr	Pro	Glu	Glu
	130					135					140				
Val	Val	Asp	Arg	Ile	Phe	Leu	Leu	Val	Asp	Glu	Asn	Gly	Asp	Gly	Gln
145					150				155					160	
Leu	Ser	Leu	Asn	Glu	Phe	Val	Glu	Gly	Ala	Arg	Arg	Asp	Lys	Trp	Val
			165					170					175		
Met	Lys	Met	Leu	Gln	Met	Asp	Met	Asn	Pro	Ser	Ser	Trp	Leu	Ala	Gln
			180				185						190		
Gln	Arg	Arg	Lys	Ser	Ala	Met	Phe								
		195					200								

<210> 170

<211> 280

<212> PRT

<213> Homo sapiens

<400> 170

Met	Ala	Glu	Lys	Phe	Asp	Cys	His	Tyr	Cys	Arg	Asp	Pro	Leu	Gln	Gly
1				5					10					15	
Lys	Lys	Tyr	Val	Gln	Lys	Asp	Gly	His	His	Cys	Cys	Leu	Lys	Cys	Phe
			20					25					30		
Asp	Lys	Phe	Cys	Ala	Asn	Thr	Cys	Val	Glu	Cys	Arg	Lys	Pro	Ile	Gly
		35					40					45			
Ala	Asp	Ser	Lys	Glu	Val	His	Tyr	Lys	Asn	Arg	Phe	Trp	His	Asp	Thr
	50					55					60				
Cys	Phe	Arg	Cys	Ala	Lys	Cys	Leu	His	Pro	Leu	Ala	Asn	Glu	Thr	Phe
65					70				75					80	
Val	Ala	Lys	Asp	Asn	Lys	Ile	Leu	Cys	Asn	Lys	Cys	Thr	Thr	Arg	Glu
			85					90					95		
Asp	Ser	Pro	Lys	Cys	Lys	Gly	Cys	Phe	Lys	Ala	Ile	Val	Ala	Gly	Asp
			100					105					110		
Gln	Asn	Val	Glu	Tyr	Lys	Gly	Thr	Val	Trp	His	Lys	Asp	Cys	Phe	Thr
		115					120					125			
Cys	Ser	Asn	Cys	Lys	Gln	Val	Ile	Gly	Thr	Gly	Ser	Phe	Phe	Pro	Lys
	130					135					140				
Gly	Glu	Asp	Phe	Tyr	Cys	Val	Thr	Cys	His	Glu	Thr	Lys	Phe	Ala	Lys
145					150				155					160	
His	Cys	Val	Lys	Cys	Asn	Lys	Ala	Ile	Thr	Ser	Gly	Gly	Ile	Thr	Tyr
			165					170					175		
Gln	Asp	Gln	Pro	Trp	His	Ala	Asp	Cys	Phe	Val	Cys	Val	Thr	Cys	Ser
			180				185						190		
Lys	Lys	Leu	Ala	Gly	Gln	Arg	Phe	Thr	Ala	Val	Glu	Asp	Gln	Tyr	Tyr
		195					200					205			
Cys	Val	Asp	Cys	Tyr	Lys	Asn	Phe	Val	Ala	Lys	Lys	Cys	Ala	Gly	Cys

210		215		220
Lys Asn Pro Ile Thr Gly	Phe Gly Lys Gly Ser Ser Val Val Ala Tyr			
225	230	235		240
Glu Gly Gln Ser Trp His Asp Tyr Cys Phe His Cys Lys Lys Cys Ser				
	245	250		255
Val Asn Leu Ala Asn Lys Arg Phe Val Phe His Gln Glu Gln Val Tyr				
	260	265		270
Cys Pro Asp Cys Ala Lys Lys Leu				
	275	280		

<210> 171
 <211> 470
 <212> PRT
 <213> Homo sapiens

<400> 171

Met Leu Arg Gly Ile Ser Gln Leu Pro Ala Val Ala Thr Met Ser Trp	
1	5 10 15
Val Leu Leu Pro Val Leu Trp Leu Ile Val Gln Thr Gln Ala Ile Ala	
	20 25 30
Ile Lys Gln Thr Pro Glu Leu Thr Leu His Glu Ile Val Cys Pro Lys	
	35 40 45
Lys Leu His Ile Leu His Lys Arg Glu Ile Lys Asn Asn Gln Thr Glu	
	50 55 60
Lys His Gly Lys Glu Glu Arg Tyr Glu Pro Glu Val Gln Tyr Gln Met	
65	70 75 80
Ile Leu Asn Gly Glu Glu Ile Ile Leu Ser Leu Gln Lys Thr Lys His	
	85 90 95
Leu Leu Gly Pro Asp Tyr Thr Glu Thr Leu Tyr Ser Pro Arg Gly Glu	
	100 105 110
Glu Ile Thr Thr Lys Pro Glu Asn Met Glu His Cys Tyr Tyr Lys Gly	
	115 120 125
Asn Ile Leu Asn Glu Lys Asn Ser Val Ala Ser Ile Ser Thr Cys Asp	
	130 135 140
Gly Leu Arg Gly Tyr Phe Thr His His His Gln Arg Tyr Gln Ile Lys	
145	150 155 160
Pro Leu Lys Ser Thr Asp Glu Lys Glu His Ala Val Phe Thr Ser Asn	
	165 170 175
Gln Glu Glu Gln Asp Pro Ala Asn His Thr Cys Gly Val Lys Ser Thr	
	180 185 190
Asp Gly Lys Gln Gly Pro Ile Arg Ile Ser Arg Ser Leu Lys Ser Pro	
	195 200 205
Glu Lys Glu Asp Phe Leu Arg Ala Gln Lys Tyr Ile Asp Leu Tyr Leu	
	210 215 220
Val Leu Asp Asn Ala Phe Tyr Lys Asn Tyr Asn Glu Asn Leu Thr Leu	
225	230 235 240
Ile Arg Ser Phe Val Phe Asp Val Met Asn Leu Leu Asn Val Ile Tyr	
	245 250 255
Asn Thr Ile Asp Val Gln Val Ala Leu Val Gly Met Glu Ile Trp Ser	
	260 265 270
Asp Gly Asp Lys Ile Lys Val Val Pro Ser Ala Ser Thr Thr Phe Asp	
	275 280 285
Asn Phe Leu Arg Trp His Ser Ser Asn Leu Gly Lys Lys Ile His Asp	
	290 295 300
His Ala Gln Leu Leu Ser Gly Ile Ser Phe Asn Asn Arg Arg Val Gly	
305	310 315 320

Leu Ala Ala Ser Asn Ser Leu Cys Ser Pro Ser Ser Val Ala Val Ile
 325 330 335
 Glu Ala Lys Lys Lys Asn Asn Val Ala Leu Val Gly Val Met Ser His
 340 345 350
 Glu Leu Gly His Val Leu Gly Met Pro Asp Val Pro Phe Asn Thr Lys
 355 360 365
 Cys Pro Ser Gly Ser Cys Val Met Asn Gln Tyr Leu Ser Ser Lys Phe
 370 375 380
 Pro Lys Asp Phe Ser Thr Ser Cys Arg Ala His Phe Glu Arg Tyr Leu
 385 390 395 400
 Leu Ser Gln Lys Pro Lys Cys Leu Leu Gln Ala Pro Ile Pro Thr Asn
 405 410 415
 Ile Met Thr Thr Pro Val Cys Gly Asn His Leu Leu Glu Val Gly Glu
 420 425 430
 Asp Cys Asp Cys Gly Ser Pro Lys Glu Cys Thr Asn Leu Cys Cys Glu
 435 440 445
 Ala Leu Thr Cys Lys Leu Lys Pro Gly Thr Asp Cys Gly Gly Asp Ala
 450 455 460
 Pro Asn His Thr Thr Glu
 465 470

<210> 172
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 172
 Met Ala Val Arg Gln Trp Val Ile Ala Leu Ala Leu Ala Ala Leu Leu
 1 5 10 15
 Val Val Asp Arg Glu Val Pro Val Ala Ala Gly Lys Leu Pro Phe Ser
 20 25 30
 Arg Met Pro Ile Cys Glu His Met Val Glu Ser Pro Thr Cys Ser Gln
 35 40 45
 Met Ser Asn Leu Val Cys Gly Thr Asp Gly Leu Thr Tyr Thr Asn Glu
 50 55 60
 Cys Gln Leu Cys Leu Ala Arg Ile Lys Thr Lys Gln Asp Ile Gln Ile
 65 70 75 80
 Met Lys Asp Gly Lys Cys
 85

<210> 173
 <211> 261
 <212> PRT
 <213> Homo sapiens

<400> 173
 Met Ala Ser Pro Asp Trp Gly Tyr Asp Asp Lys Asn Gly Pro Glu Gln
 1 5 10 15
 Trp Ser Lys Leu Tyr Pro Ile Ala Asn Gly Asn Asn Gln Ser Pro Val
 20 25 30
 Asp Ile Lys Thr Ser Glu Thr Lys His Asp Thr Ser Leu Lys Pro Ile
 35 40 45
 Ser Val Ser Tyr Asn Pro Ala Thr Ala Lys Glu Ile Ile Asn Val Gly
 50 55 60
 His Ser Phe His Val Asn Phe Glu Asp Asn Asp Asn Arg Ser Val Leu

65					70					75				80	
Lys	Gly	Gly	Pro	Phe	Ser	Asp	Ser	Tyr	Arg	Leu	Phe	Gln	Phe	His	Phe
				85					90					95	
His	Trp	Gly	Ser	Thr	Asn	Glu	His	Gly	Ser	Glu	His	Thr	Val	Asp	Gly
			100					105					110		
Val	Lys	Tyr	Ser	Ala	Glu	Leu	His	Val	Ala	His	Trp	Asn	Ser	Ala	Lys
		115					120					125			
Tyr	Ser	Ser	Leu	Ala	Glu	Ala	Ala	Ser	Lys	Ala	Asp	Gly	Leu	Ala	Val
		130				135					140				
Ile	Gly	Val	Leu	Met	Lys	Val	Gly	Glu	Ala	Asn	Pro	Lys	Leu	Gln	Lys
145					150					155					160
Val	Leu	Asp	Ala	Leu	Gln	Ala	Ile	Lys	Thr	Lys	Gly	Lys	Arg	Ala	Pro
				165					170					175	
Phe	Thr	Asn	Phe	Asp	Pro	Ser	Thr	Leu	Leu	Pro	Ser	Ser	Leu	Asp	Phe
			180					185					190		
Trp	Thr	Tyr	Pro	Gly	Ser	Leu	Thr	His	Pro	Pro	Leu	Tyr	Glu	Ser	Val
		195					200					205			
Thr	Trp	Ile	Ile	Cys	Lys	Glu	Ser	Ile	Ser	Val	Ser	Ser	Glu	Gln	Leu
	210					215					220				
Ala	Gln	Phe	Arg	Ser	Leu	Leu	Ser	Asn	Val	Glu	Gly	Asp	Asn	Ala	Val
225					230					235					240
Pro	Met	Gln	His	Asn	Asn	Arg	Pro	Thr	Gln	Pro	Leu	Lys	Gly	Arg	Thr
				245					250					255	
Val	Arg	Ala	Ser	Phe											
			260												

<210> 174
 <211> 431
 <212> PRT
 <213> Homo sapiens

<400> 174

Met	Thr	Val	Lys	Thr	Glu	Ala	Ala	Lys	Gly	Thr	Leu	Thr	Tyr	Ser	Arg
1				5					10					15	
Met	Arg	Gly	Met	Val	Ala	Ile	Leu	Ile	Ala	Phe	Met	Lys	Gln	Arg	Arg
			20					25					30		
Met	Gly	Leu	Asn	Asp	Phe	Ile	Gln	Lys	Ile	Ala	Asn	Asn	Ser	Tyr	Ala
		35					40					45			
Cys	Lys	His	Pro	Glu	Val	Gln	Ser	Ile	Leu	Lys	Ile	Ser	Gln	Pro	Gln
	50					55					60				
Glu	Pro	Glu	Leu	Met	Asn	Ala	Asn	Pro	Ser	Pro	Pro	Pro	Ser	Pro	Ser
65					70					75					80
Gln	Gln	Ile	Asn	Leu	Gly	Pro	Ser	Ser	Asn	Pro	His	Ala	Lys	Pro	Ser
				85					90					95	
Asp	Phe	His	Phe	Leu	Lys	Val	Ile	Gly	Lys	Gly	Ser	Phe	Gly	Lys	Val
			100					105					110		
Leu	Leu	Ala	Arg	His	Lys	Ala	Glu	Glu	Val	Phe	Tyr	Ala	Val	Lys	Val
		115					120					125			
Leu	Gln	Lys	Lys	Ala	Ile	Leu	Lys	Lys	Lys	Glu	Glu	Lys	His	Ile	Met
	130					135					140				
Ser	Glu	Arg	Asn	Val	Leu	Leu	Lys	Asn	Val	Lys	His	Pro	Phe	Leu	Val
145					150					155					160
Gly	Leu	His	Phe	Ser	Phe	Gln	Thr	Ala	Asp	Lys	Leu	Tyr	Phe	Val	Leu
			165						170					175	
Asp	Tyr	Ile	Asn	Gly	Gly	Glu	Leu	Phe	Tyr	His	Leu	Gln	Arg	Glu	Arg
			180					185					190		

Cys	Phe	Leu	Glu	Pro	Arg	Ala	Arg	Phe	Tyr	Ala	Ala	Glu	Ile	Ala	Ser
	195						200					205			
Ala	Leu	Gly	Tyr	Leu	His	Ser	Leu	Asn	Ile	Val	Tyr	Arg	Asp	Leu	Lys
	210					215					220				
Pro	Glu	Asn	Ile	Leu	Leu	Asp	Ser	Gln	Gly	His	Ile	Val	Leu	Thr	Asp
225					230					235					240
Phe	Gly	Leu	Cys	Lys	Glu	Asn	Ile	Glu	His	Asn	Ser	Thr	Thr	Ser	Thr
				245					250					255	
Phe	Cys	Gly	Thr	Pro	Glu	Tyr	Leu	Ala	Pro	Glu	Val	Leu	His	Lys	Gln
			260					265					270		
Pro	Tyr	Asp	Arg	Thr	Val	Asp	Trp	Trp	Cys	Leu	Gly	Ala	Val	Leu	Tyr
		275					280					285			
Glu	Met	Leu	Tyr	Gly	Leu	Pro	Pro	Phe	Tyr	Ser	Arg	Asn	Thr	Ala	Glu
	290					295					300				
Met	Tyr	Asp	Asn	Ile	Leu	Asn	Lys	Pro	Leu	Gln	Leu	Lys	Pro	Asn	Ile
305					310					315					320
Thr	Asn	Ser	Ala	Arg	His	Leu	Leu	Glu	Gly	Leu	Leu	Gln	Lys	Asp	Arg
				325					330					335	
Thr	Lys	Arg	Leu	Gly	Ala	Lys	Asp	Asp	Phe	Met	Glu	Ile	Lys	Ser	His
			340					345					350		
Val	Phe	Phe	Ser	Leu	Ile	Asn	Trp	Asp	Asp	Leu	Ile	Asn	Lys	Lys	Ile
	355						360					365			
Thr	Pro	Pro	Phe	Asn	Pro	Asn	Val	Ser	Gly	Pro	Asn	Asp	Leu	Arg	His
	370					375					380				
Phe	Asp	Pro	Glu	Phe	Thr	Glu	Glu	Pro	Val	Pro	Asn	Ser	Ile	Gly	Lys
385					390					395					400
Ser	Pro	Asp	Ser	Val	Leu	Val	Thr	Ala	Ser	Val	Lys	Glu	Ala	Ala	Glu
				405					410					415	
Ala	Phe	Leu	Gly	Phe	Ser	Tyr	Ala	Pro	Pro	Thr	Asp	Ser	Phe	Leu	
		420						425					430		

<210> 175
 <211> 381
 <212> PRT
 <213> Homo sapiens

<400> 175

Met	Pro	Phe	Ser	Asn	Ser	His	Asn	Ala	Leu	Lys	Leu	Arg	Phe	Pro	Ala
1				5					10					15	
Glu	Asp	Glu	Phe	Pro	Asp	Leu	Ser	Ala	His	Asn	Asn	His	Met	Ala	Lys
			20					25					30		
Val	Leu	Thr	Pro	Glu	Leu	Tyr	Ala	Glu	Leu	Arg	Ala	Lys	Ser	Thr	Pro
		35					40					45			
Ser	Gly	Phe	Thr	Leu	Asp	Asp	Val	Ile	Gln	Thr	Gly	Val	Asp	Asn	Pro
	50					55					60				
Gly	His	Pro	Tyr	Ile	Met	Thr	Val	Gly	Cys	Val	Ala	Gly	Asp	Glu	Glu
65					70				75					80	
Ser	Tyr	Glu	Val	Phe	Lys	Asp	Leu	Phe	Asp	Pro	Ile	Ile	Glu	Asp	Arg
				85					90					95	
His	Gly	Gly	Tyr	Lys	Pro	Ser	Asp	Glu	His	Lys	Thr	Asp	Leu	Asn	Pro
			100					105					110		
Asp	Asn	Leu	Gln	Gly	Gly	Asp	Asp	Leu	Asp	Pro	Asn	Tyr	Val	Leu	Ser
		115					120					125			
Ser	Arg	Val	Arg	Thr	Gly	Arg	Ser	Ile	Arg	Gly	Phe	Cys	Leu	Pro	Pro
	130					135					140				
His	Cys	Ser	Arg	Gly	Glu	Arg	Arg	Ala	Ile	Glu	Lys	Leu	Ala	Val	Glu

145				150				155				160			
Ala	Leu	Ser	Ser	Leu	Asp	Gly	Asp	Leu	Ala	Gly	Arg	Tyr	Tyr	Ala	Leu
				165				170				175			
Lys	Ser	Met	Thr	Glu	Ala	Glu	Gln	Gln	Gln	Leu	Ile	Asp	Asp	His	Phe
			180					185				190			
Leu	Phe	Asp	Lys	Pro	Val	Ser	Pro	Leu	Leu	Leu	Ala	Ser	Gly	Met	Ala
		195					200					205			
Arg	Asp	Trp	Pro	Asp	Ala	Arg	Gly	Ile	Trp	His	Asn	Asp	Asn	Lys	Thr
	210					215					220				
Phe	Leu	Val	Trp	Val	Asn	Glu	Glu	Asp	His	Leu	Arg	Val	Ile	Ser	Met
225					230					235					240
Gln	Lys	Gly	Gly	Asn	Met	Lys	Glu	Val	Phe	Thr	Arg	Phe	Cys	Thr	Gly
				245				250				255			
Leu	Thr	Gln	Ile	Glu	Thr	Leu	Phe	Lys	Ser	Lys	Asp	Tyr	Glu	Phe	Met
			260				265					270			
Trp	Asn	Pro	His	Leu	Gly	Tyr	Ile	Leu	Thr	Cys	Pro	Ser	Asn	Leu	Gly
	275					280					285				
Thr	Gly	Leu	Arg	Ala	Gly	Val	His	Ile	Lys	Leu	Pro	Asn	Leu	Gly	Lys
	290					295					300				
His	Glu	Lys	Phe	Ser	Glu	Val	Leu	Lys	Arg	Leu	Arg	Leu	Gln	Lys	Arg
305					310					315					320
Gly	Thr	Gly	Gly	Val	Asp	Thr	Ala	Ala	Val	Gly	Gly	Val	Phe	Asp	Val
				325				330				335			
Ser	Asn	Ala	Asp	Arg	Leu	Gly	Phe	Ser	Glu	Val	Glu	Leu	Val	Gln	Met
			340				345					350			
Val	Val	Asp	Gly	Val	Lys	Leu	Leu	Ile	Glu	Met	Glu	Gln	Arg	Leu	Glu
		355				360					365				
Gln	Gly	Gln	Ala	Ile	Asp	Asp	Leu	Met	Pro	Ala	Gln	Lys			
	370					375					380				

<210> 176
 <211> 739
 <212> PRT
 <213> Homo sapiens

<400> 176

Met	Ser	Ser	Glu	Ser	Lys	Glu	Gln	His	Asn	Val	Ser	Pro	Arg	Asp	Ser
1				5				10				15			
Ala	Glu	Gly	Asn	Asp	Ser	Tyr	Pro	Ser	Gly	Ile	His	Leu	Glu	Leu	Gln
			20					25				30			
Arg	Glu	Ser	Ser	Thr	Asp	Phe	Lys	Gln	Phe	Glu	Thr	Asn	Asp	Gln	Cys
		35				40					45				
Arg	Pro	Tyr	His	Arg	Ile	Leu	Ile	Glu	Arg	Gln	Glu	Lys	Ser	Asp	Thr
	50				55					60					
Asn	Phe	Lys	Glu	Phe	Val	Ile	Lys	Lys	Leu	Gln	Lys	Asn	Cys	Gln	Cys
65				70				75				80			
Ser	Pro	Ala	Lys	Ala	Lys	Asn	Met	Ile	Leu	Gly	Phe	Leu	Pro	Val	Leu
				85				90				95			
Gln	Trp	Leu	Pro	Lys	Tyr	Asp	Leu	Lys	Lys	Asn	Ile	Leu	Gly	Asp	Val
			100				105					110			
Met	Ser	Gly	Leu	Ile	Val	Gly	Ile	Leu	Leu	Val	Pro	Gln	Ser	Ile	Ala
	115					120					125				
Tyr	Ser	Leu	Leu	Ala	Gly	Gln	Glu	Pro	Val	Tyr	Gly	Leu	Tyr	Thr	Ser
	130				135					140					
Phe	Phe	Ala	Ser	Ile	Ile	Tyr	Phe	Leu	Leu	Gly	Thr	Ser	Arg	His	Ile
145				150				155				160			

Ser	Val	Gly	Ile	Phe	Gly	Val	Leu	Cys	Leu	Met	Ile	Gly	Glu	Thr	Val	
				165					170						175	
Asp	Arg	Glu	Leu	Gln	Lys	Ala	Gly	Tyr	Asp	Asn	Ala	His	Ser	Ala	Pro	
			180					185					190			
Ser	Leu	Gly	Met	Val	Ser	Asn	Gly	Ser	Thr	Leu	Leu	Asn	His	Thr	Ser	
		195					200					205				
Asp	Arg	Ile	Cys	Asp	Lys	Ser	Cys	Tyr	Ala	Ile	Met	Val	Gly	Ser	Thr	
	210					215					220					
Val	Thr	Phe	Ile	Ala	Gly	Val	Tyr	Gln	Val	Ala	Met	Gly	Phe	Phe	Gln	
225					230					235					240	
Val	Gly	Phe	Val	Ser	Val	Tyr	Leu	Ser	Asp	Ala	Leu	Leu	Ser	Gly	Phe	
				245					250					255		
Val	Thr	Gly	Ala	Ser	Phe	Thr	Ile	Leu	Thr	Ser	Gln	Ala	Lys	Tyr	Leu	
			260					265					270			
Leu	Gly	Leu	Asn	Leu	Pro	Arg	Thr	Asn	Gly	Val	Gly	Ser	Leu	Ile	Thr	
		275					280					285				
Thr	Trp	Ile	His	Val	Phe	Arg	Asn	Ile	His	Lys	Thr	Asn	Leu	Cys	Asp	
	290					295					300					
Leu	Ile	Thr	Ser	Leu	Leu	Cys	Leu	Leu	Val	Leu	Leu	Pro	Thr	Lys	Glu	
305					310					315					320	
Leu	Asn	Glu	His	Phe	Lys	Ser	Lys	Leu	Lys	Ala	Pro	Ile	Pro	Ile	Glu	
				325					330					335		
Leu	Val	Val	Val	Val	Ala	Ala	Thr	Leu	Ala	Ser	His	Phe	Gly	Lys	Leu	
			340					345					350			
His	Glu	Asn	Tyr	Asn	Ser	Ser	Ile	Ala	Gly	His	Ile	Pro	Thr	Gly	Phe	
		355					360					365				
Met	Pro	Pro	Lys	Val	Pro	Glu	Trp	Asn	Leu	Ile	Pro	Ser	Val	Ala	Val	
	370					375					380					
Asp	Ala	Ile	Ala	Ile	Ser	Ile	Ile	Gly	Phe	Ala	Ile	Thr	Val	Ser	Leu	
385					390					395					400	
Ser	Glu	Met	Phe	Ala	Lys	Lys	His	Gly	Tyr	Thr	Val	Lys	Ala	Asn	Gln	
				405					410					415		
Glu	Met	Tyr	Ala	Ile	Gly	Phe	Cys	Asn	Ile	Ile	Pro	Ser	Phe	Phe	His	
			420					425					430			
Cys	Phe	Thr	Thr	Ser	Ala	Ala	Leu	Ala	Lys	Thr	Leu	Val	Lys	Glu	Ser	
		435					440					445				
Thr	Gly	Cys	His	Thr	Gln	Leu	Ser	Gly	Val	Val	Thr	Ala	Leu	Val	Leu	
	450					455					460					
Leu	Leu	Val	Leu	Leu	Val	Ile	Ala	Pro	Leu	Phe	Tyr	Ser	Leu	Gln	Lys	
465					470					475					480	
Ser	Val	Leu	Gly	Val	Ile	Thr	Ile	Val	Asn	Leu	Arg	Gly	Ala	Leu	Arg	
				485					490					495		
Lys	Phe	Arg	Asp	Leu	Pro	Lys	Met	Trp	Ser	Ile	Ser	Arg	Met	Asp	Thr	
			500					505					510			
Val	Ile	Trp	Phe	Val	Thr	Met	Leu	Ser	Ser	Ala	Leu	Leu	Ser	Thr	Glu	
		515					520					525				
Ile	Gly	Leu	Leu	Val	Gly	Val	Cys	Phe	Ser	Ile	Phe	Cys	Val	Ile	Leu	
	530					535					540					
Arg	Thr	Gln	Lys	Pro	Lys	Ser	Ser	Leu	Leu	Gly	Leu	Val	Glu	Glu	Ser	
545					550					555					560	
Glu	Val	Phe	Glu	Ser	Val	Ser	Ala	Tyr	Lys	Asn	Leu	Gln	Thr	Lys	Pro	
				565					570					575		
Gly	Ile	Lys	Ile	Phe	Arg	Phe	Val	Ala	Pro	Leu	Tyr	Tyr	Ile	Asn	Lys	
			580					585					590			
Glu	Cys	Phe	Lys	Ser	Ala	Leu	Tyr	Lys	Gln	Thr	Val	Asn	Pro	Ile	Leu	
		595					600					605				
Ile	Lys	Val	Ala	Trp	Lys	Lys	Ala	Ala	Lys	Arg	Lys	Ile	Lys	Glu	Lys	

610		615		620
Val Val Thr Leu Gly Gly Ile Gln Asp Glu Met Ser Val Gln Leu Ser				
625		630		635
His Asp Pro Leu Glu Leu His Thr Ile Val Ile Asp Cys Ser Ala Ile				640
	645		650	
Gln Phe Leu Asp Thr Ala Gly Ile His Thr Leu Lys Glu Val Arg Arg				655
	660		665	
Asp Tyr Glu Ala Ile Gly Ile Gln Val Leu Leu Ala Gln Cys Asn Pro				670
	675		680	
Thr Val Arg Asp Ser Leu Thr Asn Gly Glu Tyr Cys Lys Lys Glu Glu				685
	690		695	
Glu Asn Leu Leu Phe Tyr Ser Val Tyr Glu Ala Met Ala Phe Ala Glu				700
705		710		715
Val Ser Lys Asn Gln Lys Gly Val Cys Val Pro Asn Gly Leu Ser Leu				720
	725		730	
				735
Ser Ser Asp				

<210> 177
 <211> 709
 <212> PRT
 <213> Homo sapiens

<400> 177
Met Ala Glu Val Glu Asp Gln Ala Ala Arg Asp Met Lys Arg Leu Glu
1 5 10 15
Glu Lys Asp Lys Glu Arg Lys Asn Val Lys Gly Ile Arg Asp Asp Ile
20 25 30
Glu Glu Glu Asp Asp Gln Glu Ala Tyr Phe Arg Tyr Met Ala Glu Asn
35 40 45
Pro Thr Ala Gly Val Val Gln Glu Glu Glu Glu Asp Asn Leu Glu Tyr
50 55 60
Asp Ser Asp Gly Asn Pro Ile Ala Pro Thr Lys Lys Ile Ile Asp Pro
65 70 75 80
Leu Pro Pro Ile Asp His Ser Glu Ile Asp Tyr Pro Pro Phe Glu Lys
85 90 95
Asn Phe Tyr Asn Glu His Glu Glu Ile Thr Asn Leu Thr Pro Gln Gln
100 105 110
Leu Ile Asp Leu Arg His Lys Leu Asn Leu Arg Val Ser Gly Ala Ala
115 120 125
Pro Pro Arg Pro Gly Ser Ser Phe Ala His Phe Gly Phe Asp Glu Gln
130 135 140
Leu Met His Gln Ile Arg Lys Ser Glu Tyr Thr Gln Pro Thr Pro Ile
145 150 155 160
Gln Cys Gln Gly Val Pro Val Ala Leu Ser Gly Arg Asp Met Ile Gly
165 170 175
Ile Ala Lys Thr Gly Ser Gly Lys Thr Ala Ala Phe Ile Trp Pro Met
180 185 190
Leu Ile His Ile Met Asp Gln Lys Glu Leu Glu Pro Gly Asp Gly Pro
195 200 205
Ile Ala Val Ile Val Cys Pro Thr Arg Glu Leu Cys Gln Gln Ile His
210 215 220
Ala Glu Cys Lys Arg Phe Gly Lys Ala Tyr Asn Leu Arg Ser Val Ala
225 230 235 240
Val Tyr Gly Gly Gly Ser Met Trp Glu Gln Ala Lys Ala Leu Gln Glu
245 250 255

Gly	Ala	Glu	Ile	Val	Val	Cys	Thr	Pro	Gly	Arg	Leu	Ile	Asp	His	Val	
			260					265					270			
Lys	Lys	Lys	Ala	Thr	Asn	Leu	Gln	Arg	Val	Ser	Tyr	Leu	Val	Phe	Asp	
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Glu	Ala	Asp	Arg	Met	Phe	Asp	Met	Gly	Phe	Glu	Tyr	Gln	Val	Arg	Ser	
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Ile	Ala	Ser	His	Val	Arg	Pro	Asp	Arg	Gln	Thr	Leu	Leu	Phe	Ser	Ala	
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Thr	Phe	Arg	Lys	Lys	Ile	Glu	Lys	Leu	Ala	Arg	Asp	Ile	Leu	Ile	Asp	
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Pro	Ile	Arg	Val	Val	Gln	Gly	Asp	Ile	Gly	Glu	Ala	Asn	Glu	Asp	Val	
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Thr	Gln	Ile	Val	Glu	Ile	Leu	His	Ser	Gly	Pro	Ser	Lys	Trp	Asn	Trp	
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Leu	Thr	Arg	Arg	Leu	Val	Glu	Phe	Thr	Ser	Ser	Gly	Ser	Val	Leu	Leu	
	370					375					380					
Phe	Val	Thr	Lys	Lys	Ala	Asn	Ala	Glu	Glu	Leu	Ala	Asn	Asn	Leu	Lys	
385					390					395					400	
Gln	Glu	Gly	His	Asn	Leu	Gly	Leu	Leu	His	Gly	Asp	Met	Asp	Gln	Ser	
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Glu	Arg	Asn	Lys	Val	Ile	Ser	Asp	Phe	Lys	Lys	Lys	Asp	Ile	Pro	Val	
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Leu	Val	Ala	Thr	Asp	Val	Ala	Ala	Arg	Gly	Leu	Asp	Ile	Pro	Ser	Ile	
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Lys	Thr	Val	Ile	Asn	Tyr	Asp	Val	Ala	Arg	Asp	Ile	Asp	Thr	His	Thr	
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Thr	Leu	Leu	Thr	Pro	Lys	Asp	Ser	Asn	Phe	Ala	Gly	Asp	Leu	Val	Arg	
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Ser	Asn	Tyr	Glu	Ala	Tyr	Lys	Pro	Ser	Thr	Gly	Ala	Met	Gly	Asp	Arg	
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Leu	Thr	Ala	Met	Lys	Ala	Ala	Phe	Gln	Ser	Gln	Tyr	Lys	Ser	His	Phe	
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Ala	Lys	Gly	Ile	Pro	Gly	Phe	Gly	Asn	Thr	Gly	Asn	Ile	Ser	Gly	Ala	
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Pro	Val	Thr	Tyr	Pro	Ser	Ala	Gly	Ala	Gln	Gly	Val	Asn	Asn	Thr	Ala	
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Ser	Gly	Asn	Asn	Ser	Arg	Glu	Gly	Thr	Gly	Gly	Ser	Asn	Gly	Lys	Arg	
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Glu	Arg	Tyr	Thr	Glu	Asn	Arg	Gly	Ser	Ser	Pro	Ser	Gln	Ser	Arg	Arg	
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Asp	Trp	Gln	Ser	Ala												

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 <211> 5178
 <212> PRT
 <213> Homo sapiens

<400> 178

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Gly	Arg	Asn	Val	Cys	Ser	Thr	Trp	Gly	Asn	Phe	His	Tyr	Lys	Thr	Phe
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Asp	Gly	Asp	Val	Phe	Arg	Phe	Pro	Gly	Leu	Cys	Asp	Tyr	Asn	Phe	Ala
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Ser	Asp	Cys	Arg	Gly	Ser	Tyr	Lys	Glu	Phe	Ala	Val	His	Leu	Lys	Arg
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Gly	Pro	Gly	Gln	Ala	Glu	Ala	Pro	Ala	Gly	Val	Glu	Ser	Ile	Leu	Leu
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Thr	Ile	Lys	Asp	Asp	Thr	Ile	Tyr	Leu	Thr	Arg	His	Leu	Ala	Val	Leu
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Asn	Gly	Ala	Val	Val	Ser	Thr	Pro	His	Tyr	Ser	Pro	Gly	Leu	Leu	Ile
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Glu	Lys	Ser	Asp	Ala	Tyr	Thr	Lys	Val	Tyr	Ser	Arg	Ala	Gly	Leu	Thr
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Leu	Met	Trp	Asn	Arg	Glu	Asp	Ala	Leu	Met	Leu	Glu	Leu	Asp	Thr	Lys
145				150					155					160	
Phe	Arg	Asn	His	Thr	Cys	Gly	Leu	Cys	Gly	Asp	Tyr	Asn	Gly	Leu	Gln
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Ser	Tyr	Ser	Glu	Phe	Leu	Ser	Asp	Gly	Val	Leu	Phe	Ser	Pro	Leu	Glu
		180					185					190			
Phe	Gly	Asn	Met	Gln	Lys	Ile	Asn	Gln	Pro	Asp	Val	Val	Cys	Glu	Asp
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Pro	Glu	Glu	Glu	Val	Ala	Pro	Ala	Ser	Cys	Ser	Glu	His	Arg	Ala	Glu
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Cys	Glu	Arg	Leu	Leu	Thr	Ala	Glu	Ala	Phe	Ala	Asp	Cys	Gln	Asp	Leu
225					230				235					240	
Val	Pro	Leu	Glu	Pro	Tyr	Leu	Arg	Ala	Cys	Gln	Gln	Asp	Arg	Cys	Arg
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Cys	Pro	Gly	Gly	Asp	Thr	Cys	Val	Cys	Ser	Thr	Val	Ala	Glu	Phe	Ser
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Arg	Gln	Cys	Ser	His	Ala	Gly	Gly	Arg	Pro	Gly	Asn	Trp	Arg	Thr	Ala
		275					280					285			
Thr	Leu	Cys	Pro	Lys	Thr	Cys	Pro	Gly	Asn	Leu	Val	Tyr	Leu	Glu	Ser
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Cys	Glu	Glu	His	Arg	Met	Asp	Gly	Cys	Phe	Cys	Pro	Glu	Gly	Thr	Val
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Tyr	Asp	Asp	Ile	Gly	Asp	Ser	Gly	Cys	Val	Pro	Val	Ser	Gln	Cys	His
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Cys	Arg	Leu	His	Gly	His	Leu	Tyr	Thr	Pro	Gly	Gln	Glu	Ile	Thr	Asn
		355					360					365			
Asp	Cys	Glu	Gln	Cys	Val	Cys	Asn	Ala	Gly	Arg	Trp	Val	Cys	Lys	Asp
	370					375					380				

Leu	Pro	Cys	Pro	Gly	Thr	Cys	Ala	Leu	Glu	Gly	Gly	Ser	His	Ile	Thr
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Thr	Phe	Asp	Gly	Lys	Thr	Tyr	Thr	Phe	His	Gly	Asp	Cys	Tyr	Tyr	Val
				405					410					415	
Leu	Ala	Lys	Gly	Asp	His	Asn	Asp	Ser	Tyr	Ala	Leu	Leu	Gly	Glu	Leu
			420					425					430		
Ala	Pro	Cys	Gly	Ser	Thr	Asp	Lys	Gln	Thr	Cys	Leu	Lys	Thr	Val	Val
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Leu	Leu	Ala	Asp	Lys	Lys	Lys	Asn	Ala	Val	Val	Phe	Lys	Ser	Asp	Gly
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Ser	Val	Leu	Leu	Asn	Gln	Leu	Gln	Val	Asn	Leu	Pro	His	Val	Thr	Ala
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Ser	Phe	Ser	Val	Phe	Arg	Pro	Ser	Ser	Tyr	His	Ile	Met	Val	Ser	Met
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Ala	Ile	Gly	Val	Arg	Leu	Gln	Val	Gln	Leu	Ala	Pro	Val	Met	Gln	Leu
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Phe	Val	Thr	Leu	Asp	Gln	Ala	Ser	Gln	Gly	Gln	Val	Gln	Gly	Leu	Cys
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Leu	Val	Glu	Ala	Thr	Gly	Ala	Gly	Phe	Ala	Asn	Thr	Trp	Lys	Ala	Gln
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Ser	Thr	Cys	His	Asp	Lys	Leu	Asp	Trp	Leu	Asp	Asp	Pro	Cys	Ser	Leu
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Asn	Ile	Glu	Ser	Ala	Asn	Tyr	Ala	Glu	His	Trp	Cys	Ser	Leu	Leu	Lys
			580					585					590		
Lys	Thr	Glu	Thr	Pro	Phe	Gly	Arg	Cys	His	Ser	Ala	Val	Asp	Pro	Ala
		595					600					605			
Glu	Tyr	Tyr	Lys	Arg	Cys	Lys	Tyr	Asp	Thr	Cys	Asn	Cys	Gln	Asn	Asn
	610					615					620				
Glu	Asp	Cys	Leu	Cys	Ala	Ala	Leu	Ser	Ser	Tyr	Ala	Arg	Ala	Cys	Thr
625					630					635					640
Ala	Lys	Gly	Val	Met	Leu	Trp	Gly	Trp	Arg	Glu	His	Val	Cys	Asn	Lys
				645					650					655	
Asp	Val	Gly	Ser	Cys	Pro	Asn	Ser	Gln	Val	Phe	Leu	Tyr	Asn	Leu	Thr
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Leu	Glu	Gly	Phe	Ala	Pro	Val	Asp	Gly	Cys	Gly	Cys	Pro	Asp	His	Thr
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Phe	Leu	Asp	Glu	Lys	Gly	Arg	Cys	Val	Pro	Leu	Ala	Lys	Cys	Ser	Cys
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Tyr	His	Arg	Gly	Leu	Tyr	Leu	Glu	Ala	Gly	Asp	Val	Val	Val	Arg	Gln
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Glu	Glu	Arg	Cys	Val	Cys	Arg	Asp	Gly	Arg	Leu	His	Cys	Arg	Gln	Ile
			740					745					750		
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		755					760					765			
Ser	Asn	Leu	Thr	Ala	Leu	Ala	Thr	Ser	Lys	Pro	Arg	Ala	Leu	Ser	Cys
	770					775					780				
Gln	Thr	Leu	Ala	Ala	Gly	Tyr	Tyr	His	Thr	Glu	Cys	Val	Ser	Gly	Cys
785					790					795					800
Val	Cys	Pro	Asp	Gly	Leu	Met	Asp	Asp	Gly	Arg	Gly	Gly	Cys	Val	Val
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Glu	Lys	Glu	Cys	Pro	Cys	Val	His	Asn	Asn	Asp	Leu	Tyr	Ser	Ser	Gly
			820					825					830		
Ala	Lys	Ile	Lys	Val	Asp	Cys	Asn	Thr	Cys	Thr	Cys	Lys	Arg	Gly	Arg

Thr	Thr	Pro	Lys	Leu	Cys	Cys	Leu	Trp	Ser	Asp	Trp	Ile	Asn	Glu	Asp		
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His	Pro	Ser	Ser	Gly	Ser	Asp	Asp	Gly	Asp	Arg	Glu	Pro	Phe	Asp	Gly		
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Val	Cys	Gly	Ala	Pro	Glu	Asp	Ile	Glu	Cys	Arg	Ser	Val	Lys	Asp	Pro		
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His	Leu	Ser	Leu	Glu	Gln	His	Gly	Gln	Lys	Val	Gln	Cys	Asp	Val	Ser		
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Val	Gly	Phe	Ile	Cys	Lys	Asn	Glu	Asp	Gln	Phe	Gly	Asn	Gly	Pro	Phe		
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Gly	Leu	Cys	Tyr	Asp	Tyr	Lys	Ile	Arg	Val	Asn	Cys	Cys	Trp	Pro	Met		
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	1395						1400					1405					
Pro	Pro	Thr	Thr	Thr	Thr	Thr	Leu	Pro	Pro	Thr	Thr	Thr	Pro	Ser	Pro		
	1410					1415					1420						
Pro	Thr	Thr	Thr	Thr	Thr	Thr	Pro	Pro	Pro	Thr	Thr	Thr	Pro	Ser	Pro		
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Pro	Ile	Thr	Thr	Thr	Thr	Thr	Pro	Leu	Pro	Thr	Thr	Thr	Pro	Ser	Pro		
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Pro	Ile	Ser	Thr	Thr	Thr	Thr	Pro	Pro	Pro	Thr	Thr	Thr	Pro	Ser	Pro		
	1460							1465					1470				
Pro	Thr	Thr	Thr	Pro	Ser	Pro	Pro	Thr	Thr	Thr	Pro	Ser	Pro	Pro	Thr		
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	1490				1495					1500							
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1505				1510						1515					1520		
Thr	Thr	Pro	Ser	Pro	Pro	Thr	Thr	Thr	Thr	Thr	Thr	Pro	Pro	Pro	Thr		
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Thr	Thr	Pro	Ser	Pro	Pro	Thr	Thr	Thr	Pro	Ile	Thr	Pro	Pro	Thr	Ser		
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		1605						1610				1615					
Thr	Pro	Ser	Pro	Pro	Thr	Thr	Thr	Pro	Ile	Thr	Pro	Pro	Thr	Ser	Thr		
	1620							1625				1630					
Thr	Thr	Leu	Pro	Pro	Thr	Thr	Thr	Pro	Ser	Pro	Pro	Pro	Thr	Thr	Thr		
	1635					1640					1645						
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	1650					1655				1660							
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1745		1750		1755		1760
Leu Pro Pro Ser	Ile Thr Pro Pro Thr	Phe Ser Pro Phe Ser Thr Thr				
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Thr Pro Thr Thr	Pro Cys Val Pro Leu Cys Asn Trp Thr Gly Trp Leu					
	1780	1785		1790		
Asp Ser Gly Lys	Pro Asn Phe His Lys Pro Gly Gly Asp Thr Glu Leu					
	1795	1800		1805		
Ile Gly Asp Val Cys Gly	Pro Gly Trp Ala Ala Asn Ile Ser Cys Arg					
	1810	1815		1820		
Ala Thr Met Tyr	Pro Asp Val Pro Ile Gly Gln Leu Gly Gln Thr Val					
	1825	1830		1835		1840
Val Cys Asp Val	Ser Val Gly Leu Ile Cys Lys Asn Glu Asp Gln Lys					
	1845	1850		1855		
Pro Gly Gly Val	Ile Pro Met Ala Phe Cys Leu Asn Tyr Glu Ile Asn					
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Val Gln Cys Cys	Glu Cys Val Thr Gln Pro Thr Thr Met Thr Thr Thr					
	1875	1880		1885		
Thr Thr Glu Asn	Pro Thr Pro Pro Thr Thr Thr Pro Ile Thr Thr Thr					
	1890	1895		1900		
Thr Thr Val Thr	Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr					
	1905	1910		1915		1920
Thr Thr Pro Ile	Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro					
	1925	1930		1935		
Thr Gly Thr Gln	Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr					
	1940	1945		1950		
Val Thr Pro Thr	Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr					
	1955	1960		1965		
Pro Ile Thr Thr	Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly					
	1970	1975		1980		
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	1985	1990		1995		2000
Pro Thr Pro Thr	Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile					
	2005	2010		2015		
Thr Thr Thr Thr	Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln					
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	2035	2040		2045		
Pro Thr Pro Thr	Gly Thr Gln Thr Pro Thr Thr Thr Thr Pro Ile Thr Thr					
	2050	2055		2060		
Thr Thr Thr Val	Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro					
	2065	2070		2075		2080
Thr Thr Thr Pro	Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr					
	2085	2090		2095		
Pro Thr Gly Thr	Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr					
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Thr Val Thr Pro	Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr					
	2115	2120		2125		
Thr Pro Ile Thr	Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr					
	2130	2135		2140		
Gly Thr Gln Thr	Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val					
	2145	2150		2155		2160
Thr Pro Thr Pro	Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro					
	2165	2170		2175		
Ile Thr Thr Thr	Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr					
	2180	2185		2190		
Gln Thr Pro Thr	Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro					
	2195	2200		2205		

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			2340					2345					2350		
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		2370				2375					2380				
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Thr	Thr	Thr	Pro	Ile	Thr	Thr	Thr	Thr	Thr	Val	Thr	Pro	Thr	Pro	Thr
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Gln	Thr	Pro	Thr	Thr	Thr	Pro	Ile	Thr	Thr	Thr	Thr	Thr	Val	Thr	Pro
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Thr	Pro	Thr	Pro	Thr	Gly	Thr	Gln	Thr	Pro	Thr	Thr	Thr	Pro	Ile	Thr
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Pro	Thr	Thr	Thr	Pro	Ile	Thr	Thr	Thr	Thr	Thr	Val	Thr	Pro	Thr	Pro
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Thr	Pro	Thr	Gly	Thr	Gln	Thr	Pro	Thr	Thr	Thr	Pro	Ile	Thr	Thr	Thr
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Thr	Thr	Val	Thr	Pro	Thr	Pro	Thr	Pro	Thr	Gly	Thr	Gln	Thr	Pro	Thr
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Thr	Thr	Pro	Ile	Thr	Thr	Thr	Thr	Thr	Val	Thr	Pro	Thr	Pro	Thr	Pro

Thr	Thr	Thr	Thr	Thr	Val	Thr	Pro	Thr	Pro	Thr	Pro	Thr	Gly	Thr	Gln
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Pro	Thr	Pro	Thr	Gly	Thr	Gln	Thr	Pro	Thr	Thr	Thr	Pro	Ile	Thr	Thr
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Thr	Thr	Thr	Val	Thr	Pro	Thr	Pro	Thr	Pro	Thr	Gly	Thr	Gln	Thr	Pro
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Thr	Thr	Thr	Pro	Ile	Thr	Thr	Thr	Thr	Thr	Val	Thr	Pro	Thr	Pro	Thr
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Pro	Thr	Gly	Thr	Gln	Thr	Pro	Thr	Thr	Thr	Pro	Ile	Thr	Thr	Thr	Thr
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Thr	Val	Thr	Pro	Thr	Pro	Thr	Pro	Thr	Gly	Thr	Gln	Thr	Pro	Thr	Thr
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Thr	Pro	Ile	Thr	Thr	Thr	Thr	Thr	Val	Thr	Pro	Thr	Pro	Thr	Pro	Thr
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Gln	Thr	Pro	Thr	Thr	Thr	Pro	Ile	Thr	Thr	Thr	Thr	Thr	Val	Thr	Pro
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	3620	3625		3630
Thr Pro Thr Pro Thr	Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro			
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Ile Thr Thr Thr Thr	Thr Val Thr Pro Thr Pro Thr Pro Thr Gly Thr			
	3650	3655		3660
Gln Thr Pro Thr Thr	Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro			
3665	3670	3675		3680
Thr Pro Thr Pro Thr	Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr			
	3685	3690		3695
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Pro Thr Thr Thr Pro	Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro			
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Thr Pro Thr Gly Thr	Gln Thr Pro Thr Thr Thr Thr Pro Ile Thr Thr Thr			
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Thr Thr Val Thr Pro	Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr			
3745	3750	3755		3760
Thr Thr Pro Ile Thr	Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro			
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Thr Gly Thr Gln Thr	Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr			
	3780	3785		3790
Val Thr Pro Thr Pro	Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr			
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Pro Ile Thr Thr Thr	Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly			
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Thr Gln Thr Pro Thr	Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr			
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Pro Thr Pro Thr Pro	Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile			
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Thr Thr Thr Thr Thr	Val Thr Pro Thr Pro Thr Pro Thr Gly Thr Gln			
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Thr Thr Thr Pro Ile	Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr			
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Pro Thr Gly Thr Gln	Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr			
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Gly Thr Gln Thr Pro	Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val			
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Ile Thr Thr Thr Thr	Val Thr Pro Thr Pro Thr Pro Thr Gly Thr			
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Gln Thr Pro Thr Thr Thr Pro Ile Thr Thr Thr Thr Thr Val Thr Pro
4035 4040 4045
Thr Pro Thr Pro Thr Gly Thr Gln Thr Pro Thr Thr Thr Pro Ile Thr
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Pro Ile Thr Thr Thr Thr Thr Val Thr Pro Thr Pro Thr Pro Thr Gly
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Leu Thr Thr Ser Asn Pro Pro Pro Glu Ser Ser Thr Pro Gln Thr Ser
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Arg Ser Thr Ser Ser Pro Leu Thr Glu Ser Thr Thr Leu Leu Ser Thr
4225 4230 4235 4240
Leu Pro Pro Ala Ile Glu Met Thr Ser Thr Ala Pro Pro Ser Thr Pro
4245 4250 4255
Thr Ala Pro Thr Thr Thr Ser Gly Gly His Thr Leu Ser Pro Pro Pro
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Ser Thr Thr Thr Ser Pro Pro Gly Thr Pro Thr Arg Gly Thr Thr Thr
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Gly Ser Ser Ser Ala Pro Thr Pro Ser Thr Val Gln Thr Thr Thr Thr
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Ser Ala Trp Thr Pro Thr Pro Thr Pro Leu Ser Thr Pro Ser Ile Ile
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Arg Thr Thr Gly Leu Arg Pro Tyr Pro Ser Ser Val Leu Ile Cys Cys
4325 4330 4335
Val Leu Asn Asp Thr Tyr Tyr Ala Pro Gly Glu Glu Val Tyr Asn Gly
4340 4345 4350
Thr Tyr Gly Asp Thr Cys Tyr Phe Val Asn Cys Ser Leu Ser Cys Thr
4355 4360 4365
Leu Glu Phe Tyr Asn Trp Ser Cys Pro Ser Thr Pro Ser Pro Thr Pro
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Thr Pro Ser Lys Ser Thr Pro Thr Pro Ser Lys Pro Ser Ser Thr Pro
4385 4390 4395 4400
Ser Lys Pro Thr Pro Gly Thr Lys Pro Pro Glu Cys Pro Asp Phe Asp
4405 4410 4415
Pro Pro Arg Gln Glu Asn Glu Thr Trp Trp Leu Cys Asp Cys Phe Met
4420 4425 4430
Ala Thr Cys Lys Tyr Asn Asn Thr Val Glu Ile Val Lys Val Glu Cys
4435 4440 4445
Glu Pro Pro Pro Met Pro Thr Cys Ser Asn Gly Leu Gln Pro Val Arg
4450 4455 4460
Val Glu Asp Pro Asp Gly Cys Cys Trp His Trp Glu Cys Asp Cys Tyr
4465 4470 4475 4480
Cys Thr Gly Trp Gly Asp Pro His Tyr Val Thr Phe Asp Gly Leu Tyr

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Pro	Asn	Asp	Lys	Val	Ser	Cys	Pro	Arg	Thr	Leu	Ile	Val	Arg	His	Glu								
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Thr	Gln	Glu	Val	Leu	Ile	Lys	Thr	Val	His	Met	Met	Pro	Met	Gln	Val								
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Gln	Val	Gln	Val	Asn	Arg	Gln	Ala	Val	Ala	Leu	Pro	Tyr	Lys	Lys	Tyr								
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Gly	Leu	Glu	Val	Tyr	Gln	Ser	Gly	Ile	Asn	Tyr	Val	Val	Asp	Ile	Pro								
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Gln Asp Cys Val Cys Thr Asp Lys Val Asp Asn Asn Thr Leu Leu Asn
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 Val Ile Ala Cys Thr His Val Pro Cys Asn Thr Ser Cys Ser Pro Gly
 4965 4970 4975
 Phe Glu Leu Met Glu Ala Pro Gly Glu Cys Cys Lys Lys Cys Glu Gln
 4980 4985 4990
 Thr His Cys Ile Ile Lys Arg Pro Asp Asn Gln His Val Ile Leu Lys
 4995 5000 5005
 Pro Gly Asp Phe Lys Ser Asp Pro Lys Asn Asn Cys Thr Phe Phe Ser
 5010 5015 5020
 Cys Val Lys Ile His Asn Gln Leu Ile Ser Ser Val Ser Asn Ile Thr
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 Cys Pro Asn Phe Asp Ala Ser Ile Cys Ile Pro Gly Ser Ile Thr Phe
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 Met Pro Asn Gly Cys Cys Lys Thr Cys Thr Pro Arg Asn Glu Thr Arg
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 Val Pro Cys Ser Thr Val Pro Val Thr Thr Glu Val Ser Tyr Ala Gly
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 Cys Thr Lys Thr Val Leu Met Asn His Cys Ser Gly Ser Cys Gly Thr
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 Phe Val Met Tyr Ser Ala Lys Ala Gln Ala Leu Asp His Ser Cys Ser
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 Cys Cys Lys Glu Glu Lys Thr Ser Gln Arg Glu Val Val Leu Ser Cys
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 Pro Asn Gly Gly Ser Leu Thr His Thr Tyr Thr His Ile Glu Ser Cys
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 Ala Arg Arg Ser Pro Arg His Leu Gly Ser
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<211> 508

<212> PRT

<213> Homo sapiens

<400> 179

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 His Gln Arg Phe Ser Thr Ala Ser Ala Val Pro Leu Ala Lys Thr Asp
 35 40 45
 Thr Trp Pro Lys Asp Val Gly Ile Leu Ala Leu Glu Val Tyr Phe Pro
 50 55 60
 Ala Gln Tyr Val Asp Gln Thr Asp Leu Glu Lys Tyr Asn Asn Val Glu
 65 70 75 80
 Ala Gly Lys Tyr Thr Val Gly Leu Gly Gln Thr Arg Met Gly Phe Cys
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 Ser Val Gln Glu Asp Ile Asn Ser Leu Cys Leu Thr Val Val Gln Arg
 100 105 110
 Leu Met Glu Arg Ile Gln Leu Pro Trp Asp Ser Val Gly Arg Leu Glu
 115 120 125
 Val Gly Thr Glu Thr Ile Ile Asp Lys Ser Lys Ala Val Lys Thr Val
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 Leu Met Glu Leu Phe Gln Asp Ser Gly Asn Thr Asp Ile Glu Gly Ile
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Phe	Tyr	Lys	Pro	Asn	Leu	Ala	Ser	Glu	Tyr	Pro	Ile	Val	Asp	Gly	Lys	
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Pro	Phe	Thr	Leu	Asp	Asp	Leu	Gln	Tyr	Met	Ile	Phe	His	Thr	Pro	Phe	
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Cys	Lys	Met	Val	Gln	Lys	Ser	Leu	Ala	Arg	Leu	Met	Phe	Asn	Asp	Phe	
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Leu	Ser	Ala	Ser	Ser	Asp	Thr	Gln	Thr	Ser	Leu	Tyr	Lys	Gly	Leu	Glu	
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Ala	Phe	Gly	Gly	Leu	Lys	Leu	Glu	Asp	Thr	Tyr	Thr	Asn	Lys	Asp	Leu	
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Lys	Ala	Ser	Leu	Tyr	Leu	Ser	Thr	His	Asn	Gly	Asn	Met	Tyr	Thr	Ser	
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Glu	Leu	Ala	Gly	Ser	Arg	Ile	Gly	Ala	Phe	Ser	Tyr	Gly	Ser	Gly	Leu	
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Ala	Ala	Ser	Phe	Phe	Ser	Phe	Arg	Val	Ser	Gln	Asp	Ala	Ala	Pro	Gly	
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Ser	Pro	Leu	Asp	Lys	Leu	Val	Ser	Ser	Thr	Ser	Asp	Leu	Pro	Lys	Arg	
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Asn	Gln	Arg	Glu	Gln	Phe	Tyr	His	Lys	Val	Asn	Phe	Ser	Pro	Pro	Gly	
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Glu	Gln	His	Arg	Arg	Lys	Tyr	Ala	Arg	Arg	Pro	Val					
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 <211> 914
 <212> PRT
 <213> Homo sapiens

<400> 180
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 Glu Gly Ile Val Val Ala Ile Asp Pro Asn Val Pro Glu Asp Glu Thr

Gln	Asn	Ser	Gln	Trp	Met	Asn	Gly	Thr	Val	Ile	Val	Asp	Ser	Thr	Val
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Gly	Lys	Asp	Thr	Leu	Phe	Leu	Ile	Thr	Trp	Thr	Thr	Gln	Pro	Pro	Gln
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Asp	Lys	Asn	Thr	Lys	Met	Ala	Tyr	Leu	Gln	Ile	Pro	Gly	Ile	Ala	Lys
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Val	Gly	Thr	Trp	Lys	Tyr	Ser	Leu	Gln	Ala	Ser	Ser	Gln	Thr	Leu	Thr
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Leu	Thr	Val	Thr	Ser	Arg	Ala	Ser	Asn	Ala	Thr	Leu	Pro	Pro	Ile	Thr
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Val	Thr	Ser	Lys	Thr	Asn	Lys	Asp	Thr	Ser	Lys	Phe	Pro	Ser	Pro	Leu
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Val	Val	Tyr	Ala	Asn	Ile	Arg	Gln	Gly	Ala	Ser	Pro	Ile	Leu	Arg	Ala
	610					615					620				
Ser	Val	Thr	Ala	Leu	Ile	Glu	Ser	Val	Asn	Gly	Lys	Thr	Val	Thr	Leu
625					630					635					640
Glu	Leu	Leu	Asp	Asn	Gly	Ala	Gly	Ala	Asp	Ala	Thr	Lys	Asp	Asp	Gly
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Val	Tyr	Ser	Arg	Tyr	Phe	Thr	Thr	Tyr	Asp	Thr	Asn	Gly	Arg	Tyr	Ser
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	690					695					700				
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Val	Gln	His	Lys	Gln	Val	Cys	Phe	Ser	Arg	Thr	Ser	Ser	Gly	Gly	Ser
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Phe	Val	Ala	Ser	Asp	Val	Pro	Asn	Ala	Pro	Ile	Pro	Asp	Leu	Phe	Pro
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Pro	Gly	Gln	Ile	Thr	Asp	Leu	Lys	Ala	Glu	Ile	His	Gly	Gly	Ser	Leu
		755					760					765			
Ile	Asn	Leu	Thr	Trp	Thr	Ala	Pro	Gly	Asp	Asp	Tyr	Asp	His	Gly	Thr
	770					775					780				
Ala	His	Lys	Tyr	Ile	Ile	Arg	Ile	Ser	Thr	Ser	Ile	Leu	Asp	Leu	Arg
785					790					795					800
Asp	Lys	Phe	Asn	Glu	Ser	Leu	Gln	Val	Asn	Thr	Thr	Ala	Leu	Ile	Pro
			805						810					815	
Lys	Glu	Ala	Asn	Ser	Glu	Glu	Val	Phe	Leu	Phe	Lys	Pro	Glu	Asn	Ile
		820						825					830		
Thr	Phe	Glu	Asn	Gly	Thr	Asp	Leu	Phe	Ile	Ala	Ile	Gln	Ala	Val	Asp
		835					840					845			
Lys	Val	Asp	Leu	Lys	Ser	Glu	Ile	Ser	Asn	Ile	Ala	Arg	Val	Ser	Leu
	850					855					860				
Phe	Ile	Pro	Pro	Gln	Thr	Pro	Pro	Glu	Thr	Pro	Ser	Pro	Asp	Glu	Thr
865					870					875					880
Ser	Ala	Pro	Cys	Pro	Asn	Ile	His	Ile	Asn	Ser	Thr	Ile	Pro	Gly	Ile
			885						890					895	
His	Ile	Leu	Lys	Ile	Met	Trp	Lys	Trp	Ile	Gly	Glu	Leu	Gln	Leu	Ser
		900						905					910		
Ile	Ala														

<210> 181

<211> 61
 <212> PRT
 <213> Homo sapiens

<400> 181

Met	Asp	Pro	Asn	Cys	Ser	Cys	Ala	Ala	Gly	Val	Ser	Cys	Thr	Cys	Ala
1				5					10					15	
Gly	Ser	Cys	Lys	Cys	Lys	Glu	Cys	Lys	Cys	Thr	Ser	Cys	Lys	Lys	Ser
			20					25					30		
Cys	Cys	Ser	Cys	Cys	Pro	Val	Gly	Cys	Ser	Lys	Cys	Ala	Gln	Gly	Cys
			35				40					45			
Val	Cys	Lys	Gly	Ala	Ser	Glu	Lys	Cys	Ser	Cys	Cys	Asp			
	50					55					60				

<210> 182
 <211> 260
 <212> PRT
 <213> Homo sapiens

<400> 182

Met	Ser	His	His	Trp	Gly	Tyr	Gly	Lys	His	Asn	Gly	Pro	Glu	His	Trp
1				5				10						15	
His	Lys	Asp	Phe	Pro	Ile	Ala	Lys	Gly	Glu	Arg	Gln	Ser	Pro	Val	Asp
			20					25					30		
Ile	Asp	Thr	His	Thr	Ala	Lys	Tyr	Asp	Pro	Ser	Leu	Lys	Pro	Leu	Ser
			35				40					45			
Val	Ser	Tyr	Asp	Gln	Ala	Thr	Ser	Leu	Arg	Ile	Leu	Asn	Asn	Gly	His
	50					55					60				
Ala	Phe	Asn	Val	Glu	Phe	Asp	Asp	Ser	Gln	Asp	Lys	Ala	Val	Leu	Lys
65				70					75					80	
Gly	Gly	Pro	Leu	Asp	Gly	Thr	Tyr	Arg	Leu	Ile	Gln	Phe	His	Phe	His
				85				90						95	
Trp	Gly	Ser	Leu	Asp	Gly	Gln	Gly	Ser	Glu	His	Thr	Val	Asp	Lys	Lys
			100					105					110		
Lys	Tyr	Ala	Ala	Glu	Leu	His	Leu	Val	His	Trp	Asn	Thr	Lys	Tyr	Gly
			115				120					125			
Asp	Phe	Gly	Lys	Ala	Val	Gln	Gln	Pro	Asp	Gly	Leu	Ala	Val	Leu	Gly
			130			135					140				
Ile	Phe	Leu	Lys	Val	Gly	Ser	Ala	Lys	Pro	Gly	Leu	Gln	Lys	Val	Val
145				150						155				160	
Asp	Val	Leu	Asp	Ser	Ile	Lys	Thr	Lys	Gly	Lys	Ser	Ala	Asp	Phe	Thr
				165				170						175	
Asn	Phe	Asp	Pro	Arg	Gly	Leu	Leu	Pro	Glu	Ser	Leu	Asp	Tyr	Trp	Thr
			180					185					190		
Tyr	Pro	Gly	Ser	Leu	Thr	Thr	Pro	Pro	Leu	Leu	Glu	Cys	Val	Thr	Trp
			195				200					205			
Ile	Val	Leu	Lys	Glu	Pro	Ile	Ser	Val	Ser	Ser	Glu	Gln	Val	Leu	Lys
			210			215					220				
Phe	Arg	Lys	Leu	Asn	Phe	Asn	Gly	Glu	Gly	Glu	Pro	Glu	Glu	Leu	Met
225				230						235				240	
Val	Asp	Asn	Trp	Arg	Pro	Ala	Gln	Pro	Leu	Lys	Asn	Arg	Gln	Ile	Lys
				245				250						255	
Ala	Ser	Phe	Lys												
			260												

<210> 183
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 183
 Met Asp Pro Asn Cys Ser Cys Glu Ala Gly Gly Ser Cys Ala Cys Ala
 1 5 10 15
 Gly Ser Cys Lys Cys Lys Lys Cys Lys Cys Thr Ser Cys Lys Lys Ser
 20 25 30
 Cys Cys Ser Cys Cys Pro Leu Gly Cys Ala Lys Cys Ala Gln Gly Cys
 35 40 45
 Ile Cys Lys Gly Ala Ser Glu Lys Cys Ser Cys Cys Ala
 50 55 60

<210> 184
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 184
 Met Asp Pro Asn Cys Ser Cys Ala Ala Gly Val Ser Cys Thr Cys Ala
 1 5 10 15
 Ser Ser Cys Lys Cys Lys Glu Cys Lys Cys Thr Ser Cys Lys Lys Ser
 20 25 30
 Cys Cys Ser Cys Cys Pro Val Gly Cys Ala Lys Cys Ala Gln Gly Cys
 35 40 45
 Ile Cys Lys Gly Ala Ser Glu Lys Cys Ser Cys Cys Ala
 50 55 60

<210> 185
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 185
 Met Leu Thr Val Ala Leu Leu Ala Leu Leu Cys Ala Ser Ala Ser Gly
 1 5 10 15
 Asn Ala Ile Gln Ala Arg Ser Ser Ser Tyr Ser Gly Glu Tyr Gly Ser
 20 25 30
 Gly Gly Gly Lys Arg Phe Ser His Ser Gly Asn Gln Leu Asp Gly Pro
 35 40 45
 Ile Thr Ala Leu Arg Val Arg Val Asn Thr Tyr Tyr Ile Val Gly Leu
 50 55 60
 Gln Val Arg Tyr Gly Lys Val Trp Ser Asp Tyr Val Gly Gly Arg Asn
 65 70 75 80
 Gly Asp Leu Glu Glu Ile Phe Leu His Pro Gly Glu Ser Val Ile Gln
 85 90 95
 Val Ser Gly Lys Tyr Lys Trp Tyr Leu Lys Lys Leu Val Phe Val Thr
 100 105 110
 Asp Lys Gly Arg Tyr Leu Ser Phe Gly Lys Asp Ser Gly Thr Ser Phe
 115 120 125
 Asn Ala Val Pro Leu His Pro Asn Thr Val Leu Arg Phe Ile Ser Gly
 130 135 140
 Arg Ser Gly Ser Leu Ile Asp Ala Ile Gly Leu His Trp Asp Val Tyr

